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Educational Theory....

DOES WORLD-VIEW OF DEWEY SUPPORT CREATIVE EDUCATION?

ON MCMURRAY'S AUTONOMOUS DISCIPLINE OF EDUCATION

POSTULATIONAL SYSTEMS

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TABLE OF CONTENTS ON BACK COVER

Educational Theory

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DOES THE WORLD-VIEW OF JOHN DEWEY SUPPORT CREATIVE EDUCATION?

BY J. HERBERT BLACKHURST

PART II: HIGHER MENTAL PROCESSES

In the October issue of *Educational Theory* we described the basic elements of Dewey's world-view—the nature of matter, mind, and consciousness as these appear within the frame of naturalistic idealism. It was pointed out there that this world-view differs from other naturalistic world-views, for example, that of the Herbartians, or that of materialists, in that it denies the reality of substance as so conceived that it may serve as ground for support of processes. In this respect, Dewey's view was shown to be one with that of Hegel. The point was then made that a denial of substance and, hence, of the material world and man as a material organism, implied that man is not a center of creativity and in turn that our social order is more akin to the conception of proper cosmic unfolding than to the conception of a democracy, brought about by the self-created purpose of the individual man in the interest of his becoming and dignity.

In this, the second paper, we shall consider Dewey's treatment of the mental processes as these are related to the more basic aspects of his world-view.

Imaginary and Real Objects Compared

If objects are to be fully contained within the framework of events with meaning, how then, is the ontological status of a sense-perceived object to differ from that which we call a fictional object? To quote:

> "The proposition that the perception of a horse is objectively valid and that of a centaur fanciful and mythical does not denote that one is a meaning of natural events and the other is not. It denotes that they are meanings referable to *different* events, and that confused and harmful consequences result from attributing them to the same events. The idea that the consciousness of a horse as now

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present and of a centaur differ *as* perceptions, or states of awareness, is an illustration of the harm wrought by introspective psychology, which, here as elsewhere, treats *relations of objects* as if they were inherent qualities of an immediate subject-matter, ignoring the fact that causal relationships to unperceived things are involved. The matter of the cognitive validity of the horse-perception and the cognitive invalidity of the centaur-perception is not an affair of intrinsic difference in the two perceptions, which inspection of the two states of awareness as such can ever bring to light; it is a causal matter, brought to light as we investigate the causal antecedents and consequents of the events having the meanings."[1]

In the above quotation Dewey indirectly reveals his denial of the reality of matter qua matter. Because a horse for him is not a horse in the sense that a material monist means by an objective horse both the horse and the centaur stand on the same footing ontologically. Both are concepts or meanings and are as revealed in the field of consciousness. Hence, there is left only the consequences of a train of events in which either should enter as a means of determining which is real and which is fiction. If one makes plans to plow his field with a centaur for power he will be disappointed. That is, a centaur will not fit into that sort of train of events when thought is engaged in predicting events. Of course, just as mental states there is no inherent difference between two concepts. But this does not necessarily imply that the referents of the conscious states stand on the same footing ontologically. And thought has other means than recalled consequences of accepting and acting upon the fanciful object by which to determine which of two objects has real or independent reality and which has no objective reality, i.e. has only subjective reality. If one is looking at a horse the vision cannot be changed at will in the sense that he can look at a horse and see a bear. But if the image is without the support of the presence of an objective horse, i.e., is only the subjective horse of the mental field one may change it for a bear, put wings on the horse, give it any color or size he desires, etc. In short one does not need to attempt to ride his image of a horse to tell whether the object is or is not valid. It is because Dewey accepts no ontological distinction between the field of mental affairs and reality that he can consistently speak of no other criterion than causal antecedents and consequents with which to distinguish between an object with an objective correlate and an object which has no objective correlate. Not recognizing the two types of objects he, of course, cannot logically make reference to objective reality in judging which of two experience objects is valid.

While revery supports the notion that consciousness is disconnected from objective physical events in the idealist's pattern of argument it also supports the materialist's position that all mental life is the result of brain behavior. But it can only cast doubt upon the position of the realistic naturalist, for consistency demands that he view the revery object as objectively real. For him what common sense calls an imaginary object (a centaur or elf) is ontologically as real as an objective horse or man. On the other hand, Dewey most certainly realized that such objects as centaurs could better be explained as the result of the activity of centrally-excited ganglia in the playful process of abstraction and reorganization. The fact that he had the daring to attempt an explanation based upon natural realism only confirms the degree to which he was influenced by the neo-Hegelianism which dominated thought during the formative period of his life.

[1]John Dewey. *Experience and Nature.* (Open Court Publishing Company, 1925), p. 321.

> "We return, accordingly, from this excursion to the assertion that the objects of revery-consciousness are just as much cases of perceived meanings or ideas of events as are those of sensory perceptual consciousness. *Only*—they are not as *good* objects with respect to direction of subsequent conduct, including the conduct of knowledge. Revery-consciousness, and the influence upon beliefs of effective wishes of which we are not aware, are facts crucial for any theory of consciousness. If they support the hypothesis that all consciousness is awareness of meanings, they also seem at first sight to contradict the supposition that the meanings perceived are those of natural events. Since their objects are notoriously 'unreal,' they seem to support the notion that consciousness is disconnected from physical events, and that any valid connection which may be set up, either in practical conduct or in knowing, is adventitious."[2]

Had Dewey accepted the reality of matter he would have found in the nature of revery no support for the view that consciousness is disconnected from physical events. It is as reasonable to assume that revery-consciousness attends brain activity and only brain activity as it is to assume that pain-consciousness or tree-consciousness attends only brain activity. A revery object is reasonably assumed to be the result of the disjuncture and recombination of neural elements formerly involved in sense impression. Once assumed the physical world and revery-object present no logical or philosophical problem.

Because Dewey maintains that the meanings perceived are those of natural events he then, when the meanings are not valid, is forced to maintain that there is something wrong with this particular set of natural events. They are less developed objects, "not as good objects with respect to the direction of subsequent conduct." But it is just as logical to maintain that there is no material object corresponding to the revery-object which appears in consciousness. It would seem that Dewey adds revery to revery in speaking of the revery-object as having other than subjective meaning. Of course, if one is engaged in a train of revery a revery-object fits into that particular train of thought better than would the mental correlate of an objectively real object. If one in a train of revery wants a horse that will fly he had better create an imaginary horse with wings. To maintain that such horses stand ontologically on the same objective footing as do what we call real horses would seem to strain unduly any world-view which makes the contention necessary.

The type of naturalism represented by Dewey views the immediate object of thought (in the language of the psychologist the *subjective object*) in a manner which reverses that which is most natural to thought. An idea such as the perception of a sense object or the idea of an elf is treated as if it possessed a reality of which the viewer is a character, whereas it is more natural to thought to think of the idea as being a character of the behavior of the self whose idea it is. And it takes a great deal of loyalty to a world-view to make matters appear otherwise.

The phenomena of dreams and memory fall into the general class of revery as does the whole field of abstract meaning. However, because dreams accompany the behavior of lowered brain activity and are extremely bizarre in character little, if any, mention is made of them by realistic naturalists. Also, and this may in part account for the fact that the modern realistic school tends to ignore

[2] *Ibid.*, pp. 342–343.

them, dreams would, if an attempt were made by the realist to account for them, all but put realism to route. It is, considering all the factors which bear upon their event, most difficult to believe that they represent other than organic behavior. They seem to occur when the organism is awaking, when there exists organic disturbances such as hunger or great thirst. One can observe his waking life shading off into a dream state, etc. Also, the fact that similar states may be produced by drugs and the fact that the performance of a lobotomy relieves severe psychasthenic states would seem to argue convincingly enough that mental states take being as a character of organic (ultimately ganglionic) behavior.

NATURE OF UNIVERSALS

If a world-view is basically wrong, and it is difficult to believe that naturalistic realism in what ever form it may take is not, it still may at points imply plausible affairs, but at other points it will break down completely and deny what on other occasions it appears to support.

> "It would be difficult to imagine any doctrine more absurd that the theory that general ideas or meanings arise by the comparison of a number of particulars, eventuating in the recognition of something common to them all. . . . The history of science, to say nothing of popular beliefs, is sufficient indication of the difficulty found in submitting this irrational generalizing tendency to the discipline of experience. To call it *a priori* is to express a fact; but to impute the *a priori* character of the generalizing force of meanings to *reason* is to invert the facts."[3]

Because it is obviously not absurd to believe that thought moves from particular to general we must again examine the world-view that implies such a concept of what we are to mean by thinking. We do not obtain the idea that all crows are black by first having the experience of seeing all crows or in some *a priori* manner knowing that this is so, if it is. On the contrary, once we observe that all the particular crows which we have seen have the quality of being black we associate blackness with crows. This is the lowest form of generalization from particulars to universals but it is genuine. Newton would not have arrived at the law of gravity had he not observed that all the instances of unsupported objects which he has previously witnessed were attended by the state of falling. Such is a precondition to the concept of "falling." Also, by having observed many particular things he had, by the process of abstraction and generalization, developed the concept "bodies." Once these generals or universals have been developed and the relation "falling" seen as the relation "attraction" Newton was ready to bring the relation of the heavenly bodies under the principle of attraction. Thus the observation of particulars prepared the ground for the idea of the universal.

Or consider the history of the development of such ideal forms as line, angle, circle, etc. The Egyptians conceived of lines as characters of things and situations. There is a likeness common to the distance between any two points and that of any other two points and, also, between the dividing line of any two a-butting fields and any other pair of a-butting fields. Man observes these space characteristics but the needs of the moment are usually so pressing that the particular is engulfed within the needs of immediate practical affairs. Such ideas of lines are a far cry from lineness. It took the genius of Thales to abstract

[3] *Ibid.*, p. 188.

to lineness from them. Are we to believe that lineness is some objective reality which might have first appeared in consciousness to be later followed by ideas of particular lines?

The statements of Dewey which are quoted immediately above would seem to be beyond comprehension. Such a view of universals does not come as a necessary implication of any expressed world-view, the closest approach being the view of Plato, who conceived pure abstractions, as the psychologist would call them today, to be the most real of reality—Ideas, concrete particulars being but shadows. But the view that mind is process permits of the conception that thought may develop in one direction as well as in another. Only by observing how we do think can we make a determination. And, while there are occasions, many of them, when thought obviously travels from universal to particular we find upon analysis the universal was first created by observing a common quality of a number of particulars. It is reasonable to assume that even the axioms of mathematics could not arise in thought without first having had sense perceptions of particular concrete objects.

What we have said above applies only to that area of mental life in which the organism is taking on the necessary conditioning for higher and more effective adjustments. In that area of life which we may call the consummative, immediate and particular objects are terminal affairs arising from a more stable set of conditions in the background. Because such objects are precarious and fleeting, we may value more the common universal conditions by which desirable, though fleeting, particulars may be had. These are, in a sense, universals from which particulars may take being. But it by no means follows from the relation of universals to particulars in the area of values that such universals as are involved were not first attained from experience with particulars. As the capacity to create concepts is attained percepts are enriched. Many of the particulars of which Dewey speaks are sense perceptions. Far more, of course, are objects of reverie. In the language of the materialist, the organism has, through its responses to objective material objects, so conditioned itself that it may on occasion create these precarious particulars.

If the organism is conceived as but a flux of events which "embody" meanings as opposed to a material center which creates all the meanings it knows or exists, then nothing creative as far as the behavior of the self (intrinsically considered) is going on. If universals are objectively extant reality there is no logical reason why they should not appear prior to and independent of particular impressions and meanings. Furthermore, to speak of ideas as a flux of events, either organic or extra-organic events, to say the least, in no way helps man to view himself as creative. As far as Dewey's conception of meaning is concerned it would appear that meaning was as ready-made for Dewey as for Plato. The fact that meaning is in a constant state of flux makes it no less a *given* (something bestowed) for Dewey than for Plato. Under the assumption that ideas are given it is absurd to speak of them as created by any method; that is to say, it is absurd as far as man's creating them is concerned. They may, of course, create themselves, if this is conceivable. In other words, if Dewey's realism is true it would seem to make no basic difference to the status of man as a creative being whether his perfects or generalized meanings were finished at "the beginning of time" or have the status of a momentary flux.

But the implications of which we have been speaking are precisely those which Dewey elides. His adversary as he views him is the substance idealist who would have the better of the argument as presented above. However, in striking at mentalism he also hits the materialist bystander with whom he would likely have more patience, since the latter is also a naturalist. But the materialist, holding as he does to a substance view of the universe, may conceive of man as creative in something of the sense in which the idealist views God as being creative. In the one instance the creative force is matter and in the other it is mind or spirit. Dewey can have none of either without negating his denial of substance.

Because Dewey cannot deal adequately, if at all, with the field of abstraction as presented above he selects his own battleground.

> "Thus every meaning is generic or universal. It is something common between speaker, hearer and the thing to which speech refers. It is universal also as a means of generalization. For a meaning is a method of action, a way of using things as a means to a shared consummation, and method is general, though the things to which it is applied are particular. The meaning, for example, of portability is something in which two persons and an object share. But portability after it is once apprehended becomes a way of treating other things; it is extended widely."[4]

If we are not to conceive of meanings as private affairs, Dewey must be speaking of what the materialist would call the ways of objective matter (objective method) as if it were the general of experience. If my idea of the earth is the earth or of the same reality as the earth would be if no life existed, then, I suppose, we may speak of the earth's behavior as meaning. In a similar manner we may speak of the objective correlates of our ideas of portability. But we may also suppose that these laws operated when glaciers carried rocks and, furthermore, that they were then as now no part of mere thought. Where was reality before thought, as the individual knows it, existed? Are we to assume that cosmic thought existed then and performed the feats of which the geologist speaks? Or, when we think of these events today, are we bringing any part of them to present reality? Considering such matter makes us wonder if natural realism does not fall by its own weight.

THE LOGICAL CONSTANT*

It would seem that Dewey cannot make a clear disposition of the logical constant. We find in thought fixed meanings, triangles, squares, pi, infinity, etc., which seem in some sense to serve as boundaries or limits to the movement of thought. One may, of course, with the classical Greeks conceive them to be the most real of objects in that they appear to exist wholly independently of the vicissitudes of times and situations. But how is the natural realist to deal with these objects? Remember, he does not consider them to be private states of brain mindedness. They are public affairs. How are they to be related to such experiential objects as are at all times contingently changing? The fixed and the eternal somehow mingle with the contingent or crevasse-like spread through the field of objective mental events. The natural realist cannot treat

[4] *Ibid.*, p. 187.

*A magnitude that does not change in meaning.

the logical constants as mere names, much as John may stand for a person, whatever his reality may be. They express their innermost content directly as meaning.

To show the nature of the logical constants from the view that thought is brain mindedness let us consider one instant involving infinity.

If one line is conceived to remain stationary while a second line is conceived to rotate through a point off the stationary line while intersecting that line at points farther and farther distant from a perpendicular intersection of the two lines we have the possibility of an infinite series of angles approaching zero and 90 degrees respectively. The spell cannot be broken by conceiving intersection to take place at any point however far removed into space. To create the concept "parallel lines" we must drop the series of intersecting lines and create its opposite at one stroke. Viewed as external realities these two concepts remind one of objects on either side of a canyon which cannot be crossed. Going from the one to the other in thought is, in the objectivist's frame of reference, like stepping into another dimension of space and by so doing appear on the other side of an abyss.

Affairs are much simplified by taking the minded-brain point of view. One state of mindedness cannot express a concept and its logical opposite in one coherent negating relationship when the relationship is that of magnitude. We have here an illustration of how a brain must behave in such a situation and not some transcendental object called "infinity" or a fissure in a field of cosmic reality. This is a simple and direct accounting of perfects and of the approach to them which Dewey is denied because of his denial of matter as substance reality.

Similarly, thought cannot move from the imperfect and contingent to the perfect. Thought does not somehow hurl itself from the one to the other; instead it drops one and takes on the other. And this is even true of the analyzed concept of going from position A to position B as Zeno has shown which only means that the world of thought and the world itself may be quite different worlds. One holding to the reality of thought alone, as Dewey does, is in trouble at many points but at none more than in the problem of the relation of contingents to perfects.

CAUSALITY

Dewey's view of causality is well expressed in the following quotation:

> "The view held—or implied—by some 'mechanists', which treats of an initial term as if it had an inherent generative force which it somehow emits and bestows upon its successors, is all of a piece with the view held by teleologists which implies that an end brings its own antecedents. Both isolate an event from the history in which it belongs and in which it has its character. Both make a factitiously isolated position in a temporal order a mark of true reality, one theory selecting initial place and the other final place. But in fact causality is another name for the sequential order itself; and since this is an order of a history having a beginning and an end, there is nothing more absurd than setting causality over against either initiation or finality."[5]

[5] *Ibid.*, pp. 99–100.

To say that cause is but a name for a sequential order of events is only to say that there is no such thing as cause. This is only an implication of Dewey's form of naturalism and indirectly to say that man endures his world as opposed to in some measure determines it. On the other hand, the teleological views which Dewey mentions above merely assert the reality of causation. To say the least, they do nothing to enhance the plausibility of causation. On the other hand, there is no possibility of viewing man as a center of creativity unless causality is in some sense a fact.

There is yet another possible way of viewing causation which, I believe, is reasonably plausible and roughly describes the manner in which such causation as exists takes being. Let us first recognize that a mere chain of events whether the result of necessity or chance is at the opposite pole from what can be meant by cause. Cause, if it is a reality, is rather a breaking into a lower-order chain of events and setting matters upon a course which they otherwise would not have taken. Cause can only be a name for a creative act in which what would have been is cast away and what otherwise would not have been takes reality. This creative function, assigned by the past to God, likely belongs in reality to man. When philosophers turned to naturalism as a source of the vital force which makes for such purposes as we know in experience and for apparent freedom they turned to cosmic nature in the large. This was in a sense but a revival of earlier naturalism. The ages-long search for the source of life and mind, leading through both the outside and inside the natural cosmic order reminds one of Conrad's Acres of Diamonds; the thing sought may ultimately prove to be at home.

Because by far the most wonderful object in existence is the human body (mainly the brain) one can find little or no reason to search for a vitalistic source elsewhere. If a human organism cannot produce it then it likely does not exist. But the human organism may well be assumed to be sufficiently organic when functioning at the level at which purpose appears in the mental field so to implement this purpose as to break into lower-order affairs and bring about that which otherwise would not have happened. And it is not necessary to assume that the willed act takes place on every occasion on which we appear to be interceding in affairs. If on any red-letter occasion in a lifetime a willed act is performed all future living is, at least, freedom based though in itself as necessitarian as we may well assume cosmic nature to be.[6] Cause, if it can happen, is an organic function resulting from a higher plane of behavior than that attending the inorganic world.

Thus viewed, causality is not an affair in which a simple initial term emits some generative force with which it moves its successor. Such a concept, if true of affairs, suggests only mechanism. The concept of causality which truly concerns man is that which, if true, would make freedom a reality.

NATURE OF COMMUNICATION

To speak of meaning as something common between speaker, listener, and the object or thing to which speech refers, takes us at once to the problem of communication. But the concept of communication, taken literally (to impart, convey), demands the reality of mental entities. However these may be con-

[6]For a more detailed discussion see: *Body-mind and Creativity* by the present writer, Chapter 12, Philosophical Library, 15 East 40th Street, New York, N. Y.

ceived, they must have subsistent reality which is independent of the individual person. Dewey properly denies the Herbartian reality of such entities. And, not being inclined to settle for an objective material world and the attending necessary implication that thought is but the mindedness of a brain, and hence, must be viewed as private, he is forced to a view of sharing similar to that of the neo-realists, if not identical with such a view. Dewey at this point rather uses the language of Mead, though, basically, there would seem to be no difference between Mead and the modern realists generally on the matter of communication. For them there may be a literal sharing between the mental fields of two persons and an impression or meaning which is not the private property of either.

At only one other point, that of individual creativity, does Dewey pay a greater price for his realism. It would be so much simpler and more believable to say that when I point a tree out to you I direct your organism to it only; you make the subjective tree of your mental field, as I assume I do, as a character of brain behavior which is unique to the externally stimulating situation. That our mental fields are similar may be assumed by the fact our bodies appear as similar. What would be more difficult to believe is that sense organs and neural systems so much alike as yours and mine would create radically different kinds of images. And so with meanings. Where is the need for literal communication? But with no literal communication we have epistemological solipsism which has so long been feared by philosophers. The fact that the idea of literal sharing has been the basis of bigotry and intolerance generally seems not to weigh sufficiently to make the realist suspicious of his realism. Democracy and the good life, so far as they issue from thought at all, can only issue from a realization that two persons may differ radically in views and values and each be honestly reporting his mental field. But to take and act upon this view we should realize that when we speak about sharing or communicating thought we are speaking only figuratively.

But, while meaning for Dewey is objectively real, i.e., not the private state of a minded brain, language does not serve as a mode of its transportation. Reading, for example, is not gathering thought. The printed or spoken word rather has the instrumental value of so stimulating the organism that a field of mental objects will take being. In commenting upon the following passage by Malinowski in Ogden and Richards, *The Meaning of Meaning*, p. 488:

> "A word, signifying an important utensil, is used in action, not to comment on its nature or reflect on its properties, but to make it appear, be handed over to the speaker, or to direct another man to its proper use. . . . A word *means* to a native the proper use of the thing for which it stands, exactly as an implement *means* something when it can be handled and means nothing when no active experience is at hand. . . . A word is used when it can produce an action, and not to describe one, still less to translate thoughts."[7]

Dewey says, "I know of no statement about language that brings out with the same clearness and appreciation of the force of the fact that language is primarily a mode of action used for the sake of influencing the conduct of others in connection with the speaker." But Dewey does speak of meanings as objective and public as opposed to subjective and private affairs. That language is a mode of action, I think no naturalist would question. But there is a vast difference

[7]Dewey, *op. cit.*, p. 206.

(*Continued on page 34*)

ON PROFESSOR McMURRAY'S "AUTONOMOUS DISCIPLINE OF EDUCATION"

BY JOE BURNETT

IN A RECENT ARTICLE[1] IN THIS JOURNAL, Professor Foster McMurray undertook the development of a "preface" concept of educational theory as a unique endeavor, ". . . one which has its own problems, it own line of inquiry clearly staked out, such that anyone who pursues it may find his theoretical materials and his procedures of validation contained within the discipline itself rather than in some other."[2] On the face of it, Professor McMurray's project is an ambitious one. It seems, however, to be carried off exceedingly well if, by acceptance of the explicit qualification, we regard his theory as basically a *preface* to a more fully developed theory. Even if we do not so regard it, but tend instead to view it as more than just a preface—as rather, say, the central thesis of a bold program—the concept still seems to be one which can claim the sympathetic attention of everyone concerned with educational theorizing. For, if this writer understands the matter correctly, Professor McMurray attempts to get at the heart of a problem that has been sorely troubling educational philosophy throughout its history, and offers in his positive program a feasible and perhaps a desirable answer to that problem. The problem is none other than the traditional conception and acceptance of educational theory as a half-way house betwixt formal philosophy and educational practice. Why is this a problem? Because it means that educational philosophy tacitly assumes the role, under such a conception, as an agency for the receipt, interpretation and application of theories developed largely *a priori* of the actual conditions under which a societal system of formal education proceeds.

It is certainly true, however, that formal philosophies have tended to "encompass" the area of formal education in their discussions of the natures of man and society, epistemology, ethics and aesthetics. This is particularly true of those philosophers who have in recent times devoted considerable time and attention to education *per se*.[3] But the attention that formal education has gotten has tended to be, in the general history of philosophy, the sort of attention an object of sense got by "participation" in a Platonic form. Formal education, for instance, has been considered as merely a variation on a natural process of

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[1]Foster McMurray, "Preface to an Autonomous Discipline of Education," *Educational Theory*. Vol. V, No. 3 (July, 1955), pp. 129–140.

[2]*Ibid.*, p. 129.

[3]This is particularly true of John Dewey, and to a considerable extent of Bertrand Russell and Alfred North Whitehead.

life education. Of course, formal education *is* this; but it is also something different, and here lies one point of necessary discrimination that is obvious but not often made. Formal education *is* a refinement of selected portions of the natural educative process, but control of that refined process comes by noting the special case qualities of formal education as well as the general instance of which it is a case. In short, formal education is a more complex phenomenon in its actuality than can be deduced from its consideration as basically an instance of a general philosophical theory.

The traditional attitude would seem to take it that the problems of formal education are the problems of life generally, and that the problems of life generally are pretty well described, analysed and given moral directives within the fold of philosophic theory. The first of these two assumptions can be more readily agreed to than the latter. Both parts, however, betray the educational theorist. First, the problems of formal education are not *simply* the problems of life generally. There are new and distinctive problems arising in formal education which are relegated to obscurity by so general an approach. Second, most of philosophy (and much of currently operative theology) is pre-scientific, which is to say that it is often inadequate in giving implications that can be used meaningfully in the context of modern scientific and social scientific thought. It does not especially recommend itself for either its correspondence, its coherence or its pragmatic relationship to reality as we today view it.

This is not the exact manner in which Professor McMurray states the problem, but I take it to be the sort of general view which he would have us "try on for size." In such a perspective educational theory is seen as fairly inadequate. It is the twilight zone between the "pure realm" of philosophic theory and the sensible world in which generality uncomplemented by depth of detail bogs down. Somehow, as the educational theorist hovers in this twilight zone, he must relate the two realms.[4] The tacit charge is that he has failed at this task, partly because the relationship that *can* be made is not sufficient to the conditions of the sensible world in which formal education proceeds, and partly because the theorist does not have the depth of empirical knowledge evolved from the sciences and social sciences which could fill in the philosophic inadequacy. The educational theorist emerges in this perspective as one who accepts the role of technician to philosophy. His is the business of adopting or transforming the views of formal philosophy to his area of concern, *viz.*, formal education. To carry further Plato's terminology, the educational theorist makes a copy of a copy, altering it not in detail so much as emphasis, however. But even his status as a technician is questionable, for even if he is well-informed with regard to the principles of his trade, he is not so well-informed with the conditions under which they apply—if, for the abundance of pre-scientific principles, they apply at all.

[4]An example of this view is found in a statement that Professor F. C. Wegener makes in response to the question, "What is philosophy of education?" Professor Wegener answers: "Philosophy of education is the application of philosophy to the problems of education. It encompasses the applications of philosophical concepts, principles, and methods to the particular problems in education which are more appropriately responsive to philosophy rather than science. For example, the aims of education involve some speculation which seems to transcend science in the ordinary sense. Since philosophy deals with the aims of life, it becomes helpful in determining the aims of education." (Wegener, F. C., *Guide for Students in History and Philosophy of Education.* Second revision. Dubuque, Iowa: Wm. C. Brown Co., 1953. p. 1.)

Granted for the moment that Professor McMurray's analysis, or this interpretational "copy" of his analysis, is correct and that a basic change in orientation is therefore called for in educational theory, how should it come about? Professor McMurray advocates a number of measures which he takes to suggest the manner of re-orientation.[5] Suffice it to say here that, starting from a conception of educational theory's prime concern with the "educative event," Professor McMurray is able to map out an area of distinct and unique problems. These are to become, by his proposal, the concern of educational theory. The "educative event" he describes as ". . . the deliberately initiated impact of cultural materials upon previously established learnings which modifies personality in the direction of increased capacity for intelligent behavior."[6]

From this definition and its central concepts, certain things follow in the establishment of a program for educational theory. In order to theorize in education, we will need to know such things as how the "impact" takes place under various conditions, what types of "impacts" and "cultural materials" produce the stated end, the nature of personality, the criteria for determining "increased capacity for intelligent behavior," and others.[7] The accomplishment of these things presents huge problems, but the point that seems especially pertinent is that we are now in the position to attempt to embrace such problems with some chance of success in answering them. Theoretically, at least, all of the problems noted above are capable of being treated by the methods of the sciences and social sciences. That is to say, we are able to formulate hypotheses for which confirmatory or disconfirmatory data are capable of being discovered.

Professor McMurray notes that his definition of the "educative event" is in some respects arbitrary,[8] and offers it merely as an instance of what he thinks is needed. The merits of his definition and others that we could envisage along similar lines are: that they would allow us to avoid the objections raised to traditional educational theory's way of proceeding; that they grant us the use of formal philosophy and other disciplines, but not subordination to their categories; that they allow the recognition and utilization of the increasingly active and fruitful social sciences; and that they create the possibility of more deliberate entry into, and control of, the educative process in all its depth and complexity.

The unique perspective accounts for the unique discipline; the "educative event" is seen in a perspective that is formally alien to that found in accounts evolved from formal philosophy. This does not mean, however, that philosophy has no relevance to the determination and structuring of the "educative event," but merely that it is not the sole, basal consideration.[9] A variety of disciplines

[5]McMurray, *op. cit.*, pp. 139–140.

[6]*Ibid.*, p. 139.

[7]*Loc. cit.*

[8]*Loc. cit.*

[9]Cf.: Champlin, N., *et al*, "The Distinctive Nature of the Philosophy of Education." *Educational Theory*. Vol. IV, No. 1 (Jan., 1954, pp. 1–3) This statement by the Philosophy of Education Society's Committee on the Nature and Function of the Discipline of the Philosophy of Education recognizes, as does Professor McMurray, that a thorough concern with education *per se* is equally important with concern for philosophy. Professor McMurray differs from the Committee in that he lays greater emphasis upon empirical analysis of the educational situation, and less emphasis upon traditional philosophical categories and positions.

should be utilized, according to Professor McMurray,[10] not in order to form an eclectic bundle of posies, but to contribute to a theory of human education as it occurs in its depth of complexity in an actual situation. Unity is gained and eclecticism avoided by organization of the various insights about a single, if internally complex, unit phenomenon—the "educative event." Psychology, sociology, anthropology, philosophy (especially epistemology) and other disciplines would necessarily be consulted, and their insights would be used to generate a theory of how, specifically, intelligent behavior is obtained under various actual conditions.

II

There is a passage in Professor Gilbert Ryle's *The Concept of Mind*[11] that seems to anticipate one of the main theses of Professor McMurray's article, although Professor Ryle himself leaves the issue that he raises undeveloped. Discussing the fallacious basis of several aspects of traditional epistemology, Professor Ryle concludes that there are two legitimate things that the term "epistemology" could designate. One of these he describes as "the Logic of Science,"[12] the other "the Grammar of Pedagogy:"

> "As there do exist the practice and the profession of teaching, there could exist a branch of philosophical theory concerned with the concepts of learning, teaching and examining. This might be called "the philosophy of learning", "the methodology of education" or, more grandly, "the Grammar of Pedagogy". This would be the theory of knowledge in the sense of being the theory of getting to know. This study would be concerned with the terms in which certain episodes in the lives of individuals are described and prescribed for by teachers and examiners."[13]

The main thesis that is anticipated is, that there is the possibility of an autonomous discipline within educational theory—one that permits of study and systemization. Furthermore, Professor Ryle seems to have something in mind that is very similar to Professor McMurray's concept of the "educative event." As he puts his conception of the discipline, it would be ". . . concerned with *the concepts of learning, teaching and examining*. . . . This study would be concerned *with the terms in which certain episodes in the lives of individuals are described and prescribed for by teachers and examiners*."[14] Professor Ryle does not go into enough detail for us to determine if the agreement with Professor McMurray is complete or merely apparent; but, if the concerns of the "Grammar of Pedagogy" are what he says, it is difficult to believe (a) that great attention to empirical analysis could be avoided, and (b) that the foundation of such a "Grammar" lies primarily in the basic concerns of formal philosophy as traditionally conceived.

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[10]McMurray, *op. cit.*, pp. 139–140.
[11]Gilbert Ryle, *The Concept of Mind* (New York: Hutchinson's University Library, 1949).
[12]*Ibid.*, p. 317.
[13]*Ibid.*, p. 318.
[14]*Loc. cit.*; italics are not in the original text.

There is other external evidence available for the support of Professor McMurray's theory, and it bears consideration by anyone who undertakes a criticism of his work. The evidence is uncovered by asking if there is anywhere an actual approach to education which does in fact proceed along the lines laid down by Professor McMurray. To some extent the theory has an implicit approximation in the work of many educational theorizers. In this category one could mention such thinkers as Pestalozzi, and to a lesser extent, Herbart and Froebel. Among more recent thinkers, the work of Dewey and Whitehead seems to illustrate the uniqueness and utility of what happens when educational theory grows out of a close concern for the actual conditions of education. Dewey furnishes several examples of this type of analysis in his writings, particularly in *Democracy and Education*,[15] and with Dewey the awareness of data drawn from the social sciences is probably better illustrated than with Whitehead. But for its usefulness in exhibiting the general characteristic of empiricism in educational theorizing, Whitehead's discussion of the "rhythmic cycle" of mental growth is probably one of the best.[16] The various stages of the Whiteheadian "cycle" are framed in terms of psychological and sociological data; are distinct from, but compatible with, the Whiteheadian epistemology; and are purportedly derived from, and applicable for, the guidance of the concrete educational situation.

With each of the men mentioned above, we have examples of theoretical considerations arising out of a close concern for the *de facto* situation in which education occurs. There are other elements present also, metaphysical and theological (depending upon which man one considers), that played a role in their theories and practices, but certainly one of the most impressive aspects of their work was the manner in which they worked with the data of the actual educative event. Today the possibilities for fruitful theories in education appear even greater, since we have better instruments and techniques of understanding the educative situation in all of its complexity. This brings us to the third point which can be offered in defense of Professor McMurray's theory; *viz.*, its tenor of great concern for the usefulness of the social sciences. As far as traditional educational philosophy has been concerned, the domain of education has been looked upon largely (although certainly not exclusively) as an aesthetic, philosophic and theological concern, the guidance of which was to be trusted to the man possessed of an artistic and religious sensitivity. This, in itself, cannot be understood as bad; but, unfortunately, it was accompanied by a disrespect for the type of analysis that takes an earthy, mundane approach to the educational process. Instead of absorbing and furthering the insights of the social sciences in the actual conditions of education, educational philosophy has tended to ply itself with worn-out categories, and its problems have become problems that philosophy proper is coming increasingly to leave behind. The situation is consistent with the theory that educational philosophy "applies" philosophy to education: educational theory must wait until formal philosophy has integrated and systematized the new materials of the sciences and social sciences before it can apply them. Situations such as this are sometimes cited instances of "cultural lag."

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[15]New York: The Macmillan Co., 1916.

[16]*The Aims of Education* (London: Williams and Norgate, 1932), pp. 24–44.

III

"Cultural lag" is too strong a term, however. What is found in educational philosophy is more properly described as a type of imbalance, rather than a lag; for philosophers of education have been strong in a respect in which the overall educational system has tended to be very weak. As a matter of fact, Professor McMurrary appears to be weak in this same respect. Philosophers of education have kept alive the religious, aesthetic and general value considerations that are found in the history of thought. This is an important function; and it necessarily demands that those who would fulfill it root themselves in a tradition that does not deal solely with contemporary methodology and scientific education, but also with philosophy, religion, history, art and other disciplines. The people who have taken this approach can legitimately argue for its significance. The only point is, that it seems the time has come when that significance alone is not enough. Taken alone, there is an imbalance which offsets the present in favor of the past.

There need be no bifurcation of interest and activity here, however, for educational philosophy is large enough an area to foster and sustain a plurality of endeavors. Moreover, since each of the two types of endeavor that are discussed herein can be reasonably argued to have an important function in advancing the quality of education, it would seem that they can be very generative of value for each other. For instance, it was mentioned above that Professor McMurray appears to be "weak" in his appreciation of the virtues of the traditional method in educational philosophy. He tends to set his theory of what constitutes educational theorizing in black-white opposition to the traditional theory.[17] As valuable as his theory seems to be, and as significant as his insistence upon a more empirical approach is, one cannot find internal to his argument any source or defense of the values which education is to pursue. "Intelligent behavior"[18] seems to be the aim of the educative process, in his estimation; but what does "intelligent behavior" mean? That is to say, of what elements does it consist? Can one be an intelligent fascist? The point is, Professor McMurray's theory is going to need values, and the very understanding of those values is going to depend upon an understanding of history and philosophy. The traditional approach is indispensible in this regard; if one ignores it in the interest of methodology he ends up with the qualitatively barren type of outlook that characterized early positivism. Further, as a general rule, it seems to be true that yea-saying philosophies that depend too heavily upon nay-saying in respect to other philosophies and methods tend ultimately to deprive themselves of sources of regeneration and advance. Science has been a long time learning this, and some of modern philosophy has not yet learned it. The initiation of a more systematic and analytic endeavor in education need not herald the initiation of another reaction against the historic sources of zest and value, the humanistic studies. Their errors in factual matters can be admitted; but they have not been completely in error even on those, and certainly the spirit embodied in them has made our world what it is. The "spirit"—aesthetic and moral insights—are in some

[17] Cf.: McMurray, *op. cit.*, pp. 130–135.
[18] *Ibid.*, p. 139.

respects quite as important to human living as empirical truth, and in some respects they are more important.

The value of the theory which Professor McMurray advocates, or a similar one, lies in its promise to push forward the realization and understanding of our historic and contemporary values. To this writer, at least, the traditional system's imbalance has been exhibited chiefly in its refusal to take advantage of newer techniques and insights for the advance of its theory and practice. There seems to be more concern with maintaining past philosophical systems (Dewey's among them) than with advancing the actual conditions of education and letting one's philosophical system be judged by what is found successful in this process.

Such a method as Professor McMurray proposes is difficult to adopt, however, and he is not sufficiently clear on many of its technical aspects. For instance, the "educative event," which is basic to the whole concern, is not spelled out in detail of meaning. One must ask if the educative event spans forty years as easily as ten minutes—that is, if it is limited in time, whether for convenience or whatever reason. Again, is it a label that is to designate primarily the education in a school classroom, or does it apply to life throughout? Further, and more important, how does Professor McMurray mean for us to take the subject-object terminology which he utilizes in discussing the educational situation, and in defining education? "Education is a process," he writes, "the significant outcome of which is some kind of change produced by educative action upon its object, the pupil."[19] This is dangerous language, not merely because it ignores the inherent activity of pupils, but also because it tends to mask the subtlety of the educative process by making the theorists' problem sound like the problem of theorists in physics. The educational theorist who measures the "impact" of cultural materials upon the "object" of education has a very different problem than these mechanistic terms suggest.

Perhaps the greatest practical problem that is raised by Professor McMurray's theory is that of an educational theorist's gaining the range of knowledge necessary for the proper fulfillment of his task. "The social sciences offer appropriate materials and so does philosophy,"[20] we are told. But this *is* a practical problem, and Professor McMurray makes it clear that we do not have to be professionals in each of the areas of the social sciences, as well as in philosophy, in order to use his approach.

> "First, it should be noted that from any given discipline, including philosophy, only selected parts are directly relevant to educational theory. Second, by contrast with traditional views on the matter, a theory or "philosophy" of education is quite as dependent upon social sciences as upon philosophy for its raw materials. Third, an educational theorist cannot ask the same kinds or questions, or pursue his inquiry from the same perspective, as have other theorists in philosophy and in the social sciences from whose constructions he might borrow."[21]

The third point is not altogether clear: in what way can't an educational theorist ask the same *kinds* of questions as theorists in philosophy and the social

[19] *Ibid.*, p. 135.
[20] *Ibid.*, p. 139.
[21] *Loc. cit.*

sciences? The other two points are well made. The first point has been long accepted in educational theory; the second one illustrates that the acceptance of Professor McMurray's proposal would involve (whether he is aware of it or not) only a shift in emphasis from the traditional position. The shift might mean one in regard merely to breadth of detail and interest. For there is nothing inherently contradictory about having people well grounded in the traditional scheme of educational philosophy, plus having them also generally acquainted and competent with the materials of other fields. An either-or disjunction is not necessary here.

REPLY

BY FOSTER MCMURRAY

Mr. Burnett's discussion of my proposal for an autonomous discipline of education is generous and even appreciative. Furthermore, it expresses criticism of a kind I would expect from many men of learning and good will. In responding to my article, Mr. Burnett's perspective is characteristically that of a humanist: that is, a concern to preserve the religious, moral, aesthetic and metaphysical insights accumulated within our traditions. I am happy to answer criticism from that quarter.

The kind of theoretical venture I had proposed is almost certain to seem challenging or threatening to a humanist. Perhaps the most important reason is that educational theory, on my description, is thoroughly empirical, and established upon foundations common to the social sciences. Hence the usual tensions between humanism and science come readily uppermost. What the humanist finds objectionable is the supposition that empirical and scientific materials exhaust the legitimate domain of educational theory. There is, he feels, much more to it than those alone. There is, he would say, the whole realm of values as well, and it is the traditional "educational philosopher" who reminds us of it and who provides the ultimate aims which educational activity cannot do without.

Knowing how reasonable such argument must seem to a humanist, I have no desire to quiet his fears save as they are based on misunderstanding. Frankly, I think he is right when he perceives a growing concern for methodological issues as an intellectual climate prejudicial to some of his interests. Like many others, I anticipate a day when attempts to determine our values by system-building theologians and metaphysicians will be judged by the public as undemocratic.

On one matter, however, the humanist is perhaps unduly alarmed. The kind of position taken in my article is not one which would in any way diminish the

importance of philosophers as distinct from scientists. Educational theory of the kind I have proposed is philosophical, not scientific, theory. The constructions of an educational theorist must be speculative or dialectic, projecting the meanings of our beliefs beyond the limits of scientifically warranted knowledge. The business of educational philosophy is to find a course of action consistent with what we believe and value. With respect both to values and to other beliefs of a non-evaluative sort, educational philosophy is necessary as the only way of theorizing responsibly beyond the limits of science. To be responsible, educational philosophy must be compatible with whatever is known. To be useful, it must be empirical in content, predicting outcomes of educational activity. These statements make evident my belief that philosophical statements affirm something to be true of human experience. Many contemporary philosophers would not agree. Philosophy, they would say, cannot compete with science in the discovery of empirical truth (which is true) and hence it must establish as its own proper domain the purely formal or logical analysis of meanings. Philosophers of that sort are closer to the humanists than to me. But the question of whose theory about philosophy is correct is one I cannot discuss in this space. And there is no need to do so. For if philosophy were not empirical, then educational theory would have to be something different; if it is not predictive of outcomes in human experience, then it would have no guiding function for educational acts. In any event, I prefer to call theorizing about education a philosophical enterprise, and there is no other term which could signify its character as both not a science and yet also guardedly theoretical.

Implicit in Mr. Burnett's position is a contention that moral and aesthetic judgments are either non-cognitive or non-empirical, and possibly both. This is a position quite familiar in contemporary value theory. No attempt can be made here to debate the matter. I wish only to point out that such is Mr. Burnetts's stand, and also to mention the different doctrine presupposed in my article. It is opposite to humanism. Moral and aesthetic judgments, it seems to me, are ventures at summarizing what has been learned in experience, and their validity is determinable eventually by their further consequences when used in guiding conduct. This means that a respect for traditional ideals simply because they are traditional, or a liking for philosophic and theologic systems simply because of their inner architectonic harmonies, is perceived as misplaced and even dangerous to public interests by one who shares my beliefs. But if Mr. Burnett's view, that value judgments are not subject to empirical testing, is correct, then of course we have no alternative save to choose among the traditions and the systems of those who claim some intuitive or aesthetic or otherwise private source for their wisdom. Philosophers and theologians eager to press such claims and traditions are plentiful in the academic homes of the liberal arts. Do we need them also among educational philosophers?

There is a further consequence of my view which seems to have escaped notice even from some who might agree with the kind of value theory I represent. If evaluations are cognitive and empirical, then values hypothesized to guide conduct must be found within the kinds of experiences for the improvement of which they are intended. Or, if not so found, then they must be applied to a different kind of situation only when strong evidence suggests a likelihood of success, and

applied then only with experimental caution. Educational values are more readily obtained from experiences with education than from following vicariously a philosopher's search for ultimate norms of the good, the true, and the beautiful. Sooner or later tradition-minded educational philosophers will have to confront the fact that in theorizing about how to educate well, we do not need to settle the philosopher's controversies about ultimate realities. John Dewey seems to have been almost alone in proposing that we not impose upon education goals obtained externally to the educative process. In many ways and places he showed how the attempts of humanists to convert traditional philosophic norms into educational goals has resulted in arrogant reaction to democratic educational reform. A philosopher's theory of ethics, telling us how we might judge the goodness of human actions, will not tell us, even by analogy, how to judge the educative goodness of educational acts.

Suppose, however, that on this matter I should be wrong. Then there is an obligation upon Mr. Burnett to show how it might be possible to base a public school program on the moral and religious values of those who construct alternative and conflicting systems of value. A part of this task includes showing how this may be done within a democratic framework, which requires that we support the right of everyone to pursue their differences on such matters with freedom and equality. Although Mr. Burnett has not satisfied that obligation (no humanist ever has), he intimates an awareness of it. He suggests that the tendency of philosophers to press their differences from one another in religious and metaphysical values is regrettable. I take it that he wishes they would resolve their differences and come to a common agreement, so that then we could also agree upon a common educational philosophy. On this matter the tables are reversed. I now find myself wanting to champion the right of philosophers and humanists to pursue alternatives, to engage in dialectic, and to provide for all of us a set of well-explored alternative perspectives on the supremely valued. I should not be happy in a society marked by unanimity on overviews of the universe. The sort of philosophy Mr. Burnett had wanted to champion is by its very nature contentious, and contentious in a way that defies reaching uncoerced agreement of the kind that scientific method alone makes possible.

Mr. Burnett asks why it should be thought that the problems of an educational theorist are different from the problems of traditional philosophers. The fact that he did not understand my argument on this matter, one which I had thought fundamental for the entire position under review, is evidence that I had failed to communicate adequately. It is unlikely that in only a few words here and now I could clarify the argument.

TOWARD UNDERSTANDING THE CONCEPT AND FUNCTION OF PLAY

BY ALVIN W. ROSE

HOW MAY WE IN OUR EDUCATIONAL THEORY really come to grips with our ever increasing problem of leisure time activity?

There are, I believe, three pivotal requirements in the understanding of our problems of recreation in contemporary living—desiderata which we in education and the social sciences are coming to recognize. We must have, first, a theoretical focus through which the analysis of recreation may best be approached; second, a clear delineation of the nature of "play" as a basic heuristic concept; and, third, in terms of this orientation, a careful formulation of investigations to study the specific socio-cultural or personal pathologies where recreation, or the lack of it, is significantly involved.

Simply put, one may state that, for purposes of understanding recreation, the problem of educational theory is to determine; first, from what theoretical base can we best fashion the study of it; second, what logically follows as its essential nature; and third, where, specifically, on the socio-personal landscape are the difficulties which are primarily matters of recreation, and what can formal education do about those difficulties.

Social Process

In the long, pedestrian drive of the social and psychological disciplines toward a science of human conduct, one of the clear and seminal precipitations has been the convergence upon the social process as the basic datum—the central fact whose faithful, empirical portrayal may offer the kind of understanding of the fabric of social existence that science properly can supply.[1] The contributions of sociology and anthropology have stressed impressively the primacy of the social-cultural in the determination of human behavior, whether directly from the impact of institutional coercion on individuals and groups or mediated via the psycho-genic influences of the primary group in fashioning the participating personalities. The rich legacy of research we now have on the nature of culture, social systems, status and role-playing has illumined measurably our understanding of social behavior. But it may be that the major significance of these contributions has been to make clear that the cultural framework and social structure,

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[1]Theodore M. Newcomb, "Social Psychological Theory," *Social Psychology at the Crossroads*, John H. Rohrer and Muzafer Sherif, (Eds.) (New York: Harper, 1951), Chapter II.

rather than yielding an explanation of the on-going dynamic of human association, provides primarily only the formal setting inside which the process of social interaction itself proceeds.[2]

In a similar way, in biology and in the comparative and individual psychologies, we have explored well the infra-human and intra-individual worlds for clues to the understanding of personal and social intercourse. The record is replete with theories of reductionism, conditioned and prepotent reflexes, instincts, drives, reaction-formations, and attitudes.[3] But, in spite of the fact that large sums of money are still being invested either in laboratory studies of mice and rabbits or in test construction and test administration programs, there has developed in psychology a considerable consensus that, for purposes of understanding people, the days of "naive analogizing from . . . the ant hill to human behavior seem to have safely passed."[4] Moreover, it now seems largely concluded that mental behavior and human nature—that "body of sentiments and attitudes such as consciousness of one's self in relation to others, love of approbation, resentment of censure, emulation and a sense of right and wrong"[5]—these are not innate. Nor can they be developed by the individual as a psychological entity. They are, rather, borne in the social process; they deteriorate, eventually perish in isolation from the social process; and they appear universally to be the exclusive possession of man. Here, too, in the biological and psychological sciences, the understanding of the social process, per se, has perforce become the prior concern.

Now, the theoretical advances (leading largely from Mead[6] and Freud) which have been made as a consequence of this convergence of the psychological and social disciplines on the social process seem clearly to indicate that a view of recreation as a functional phase of the social process might well be the basis from which a systematic Educational Theory of recreation may best be derived.

PLAY IN THE SOCIAL PROCESS

The social process, as a part of its formal structure, contains, or may contain, an element which may be recognized as play.[7] In every game or artistic activity one may recognize a sense of satisfaction which distills from the activity and which is the same whether the activity be painting, football, music, creative writing, card-playing, sculpture or the dance. In all of these there derives a common exhilaration that is distinguishable from the particular substance of each activity.

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[2]Herbert Blumer, "Psychological Import of the Human Group," *Group Relations at the Crossroads*, Muzafer Sherif and M. O. Wilson, (Eds.) (New York: Harper, 1953), Chapter VII.

[3]"Academic psychology, trying to imitate the natural sciences and laboratory methods of weighing and counting, dealt with everything except the soul. It tried to understand those aspects of man which can be examined in the laboratory and claimed that conscience, value judgements, the knowledge of good and evil are metaphysical concepts, outside the problems of psychology; it was more often concerned with insignificant problems which fitted an alleged scientific method than with devising new methods to study the significant problems of man." Eric Fromm, *Psychoanalysis and Religion* (New Haven: Yale University Press, 1950), p. 6.

[4]Muzafer Sherif, *Group Relations at the Crossroads* (New York: Harper, 1953), p. 4.

[5]Charles H. Cooley, *Human Nature and the Social Order* (New York: C. Scribner's Sons, 1902), p. 32.

[6]George H. Mead, *Mind, Self and Society* (Chicago: The University of Chicago Press, 1934).

[7]George Simmel, "The Sociology of Sociability," *The American Journal of Sociology* (November, 1949), pp. 254–261. Translated by Everett C. Hughes. The concept of play used in this paper is drawn completely from Simmel's construction.

This "residue of satisfaction", it should be stressed, is in the very process of interaction itself, existing as a part of the abstract form of human intercourse, and merely supported by the content of the given activity.

A few days ago, I saw a television show called "Beat the Clock". Two contestants were trying to excel in running across the stage within a given number of seconds with some eight or nine automobile inner-tube tires around their bodies. Now, in this game nothing was at stake. The fun was possible because and to the extent that no egos were seriously invested; and all persons, either viewing or directly participating, could laugh at the sheer play itself. At that point, however, and to the extent that the game was invaded by a serious objective such as the winning of a significant sum of money or where the ego either was self-conscious or was primarily interested in self-assertion to the embarassment or humiliation of another, play was by that much minimized in the relationship. Where, then, in the social process the values of "joy and relief and vivacity" are maximized for all participating individuals, play is at an optimum. In other words, play may be found maximized where associating for the sheer pleasure of associating is the only purpose.

I have a friend—a member of a mid-western state legislature—who conforms to what I think is a social type, "the play-boy". When we say he likes to play we mean that he has relationships with many people for no other reason than there is a mutuality of pleasure in those relationships. He is serious and has ulterior motives about none of these relationships and is so moral about them as not to allow any of the persons with whom he interacts to become serious with him. Everyone likes Roy because he is "clean" and "straight", but he is fun. He gambles "hard", but he has an amazing reputation for never cheating. He is handsome, well-groomed and drives a new Cadillac; but he is humble, gracious, of genuine integrity. He is articulate—"smooth" with the vernacular of the night world, as well as with the legalistic extravagance of the legislative chamber. But most of his conversation is not for the sake of imparting knowledge or reaching an understanding. It is rather for the sheer joy of conversation as an end in itself, where the content or substance of the conversation—whatever it be, trivial or momentous—is in the social process primarily as the carrier of the art form of play.[8]

These, then, are some of the characteristics of play as a theoretical construct: (a) play arises in the social process as a form of mutual satisfaction; (b) in this art-form, personalities, in terms of both inner qualities (character, temperament, capacities) and status attributes, are eschewed so that the interacting participants are, for that psychological situation, equals; (c) there may be no purpose of the interaction beyond immediate and pure joy of interaction itself; (f) the content of the interaction is immaterial, important only as a carrier of the play-form of interaction; (e) there may be no deceit, for where there is deceit the subjective personality either is projected into the social process as an immediate consumer via exploitation of others or reduces the process to an instrumental relationship

[8]Dr. Park once observed that the real function of art and play "is to communicate not ideas, but sentiments, incidentally, perhaps, creating and sustaining in this way a mood in which, for a space, one's sense of individual and personal differences is lessened and one's solidarity is enhanced." Robert E. Park, "Education and the Cultural Crisis", *American Journal of Sociology*, Vol. XLVIII, No. 6, May 1943, p. 108.

pursuant to an ulterior, more remote goal. In either case, play is by that much removed from the social process.

This characterization of play as an ideal construct must, of course, be validated and further delineated through carefully designed research.[9] Accordingly, two observations are relevant. In the first place, play, as we here construe it may be found as a part of the process of interaction, in more or less degree, whenever and what-ever be the sphere or substance of the social relations—economic, religious, artistic, educational, scientific, legal, political. However serious and ulterior be the several pursuits in the interest of which men associate, whether these associations occur within the cultural framework of the black, leisurely citizens of Angola in Portuguese East Africa or within the fiercely competitive context of the New York Stock Exchange, there may be in all these relationships at least a residue of this pure play-form of association for its own sake.

In the second place, notwithstanding the generic character of play as a part of the social process, the literature pointedly particularizes that in (a) the isolation of man from the social process and (b) the receding and veto of play in human association, one can account for much of the anxiety, insecurity and emptiness of personal living in contemporary culture. Within the very recent past David Riesman has written *The Lonely Crowd;* Paul Halmos, *Solitude and Privacy;* Margaret Wood, *Paths of Loneliness;* Eric Fromm, *Man for Himself.* The dominant theme of these, and other similar works, is that along with the growth and proliferation of culture have come the decline of spontaneity and the emergence of the poverty of play in human association.[10]

The implication is manifest. The sources of the decay of play-forms and art-forms in contemporary culture need to be identified, and around these sources research should be designed with the view toward understanding the mechanisms for re-incorporating the individual in the social process and for re-establishing more of the element of play in that social process which is now so over-burdened with manipulation and instrumentality.

THE LOSS OF PLAY

It is possible here, of course, to indicate only briefly a few of the sources in contemporary culture where play-forms are lost and, accordingly, to indicate needed research.

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[9]The concept "game" may be thought of as the ideal type which is polar to that of "play". The theory of the "game" is being carefully delineated and holds, in some of the literature, a central position in the analysis of competitive relations (as in economic behavior) and in some non-economic behavior (as conceptualized in the sociology of conflict). Mrs. Bernard, for instance suggests the essential characteristics of the "game" to be (a) "rational behavior", (b) "strategy", (c) "pay-off matrix or function", (d) "rules of the game", (e) "coalitions, alliances and imputations", and (f) "solution". These, I believe, may be viewed as precise, point-for-point antitheses of what we here suggest to be the characteristics of "play". See Jessie Bernard, "The Theory of Games of Strategy As A Modern Sociology of Conflict", *American Journal of Sociology,* March, 1954 pp. 411–424. See also John Von Neumann and Oskar Morgenstern, *Theory of Games and Economic Behavior* (Princeton: Princeton University Press, 1947).

[10]"Modern man's feeling of isolation and powerlessness is increased . . . by the character which all his human relationships have assumed. The concrete relationship of one individual to another has lost its direct and human character and has assumed a spirit of manipulation and instrumentality. In all social and personal relations, the laws of the market place are the rule". Eric Fromm, *The Fear of Freedom* (London: Routledge, 1942), p. 112.

In the production and marketing relations of our economy there has been legitimized a cultural style that may be rudely called deceit or, as Mr. Riesman perhaps more appropriately terms it, "false personalization". The undertaker, the filling-station attendant, the air-line hostess, the department store salesgirl, the bell-hop, the waiter, the florist, the announcers of radio and television commericals—all these people daily must confront many people whom they do not know and to whose peculiar whims, eccentricities and tastes they must somehow defer.[11]

Here is a world of psychological space that may be filled with emotional coercion, vulgar manipulation, guilt, hidden disgust and what Mr. Riesman calls "glad-handing" and politicking. It is the thesis here that there may be a poverty of play in these relations. And this fact implies needed research of several designs.

A comparative study, for instance, of American industrial recreation and the play coefficient among the artisans of Sicily or the craftsmen of Southern Italy should be instructive.[12] We also need research to determine the efficacy, as Mr. Riesman suggests, of eliminating these occupational categories to which I have referred by making the services they perform automatic. The self-service super market, the automat restaurant, the catalog mail-order houses of Sears and Montgomery Ward, or the self-operating electronic information service and directory of the Paris sub-way—these indicate such a possibility.

In addition to the dimension of false personalization in contemporary culture, there also looms large the problem of marginality. The "marginal man" is one who lives at the tangent where two cultural orientations meet and who substantially shares neither of these orientations; as one, for instance, who no longer finds participation in one racial, religious or ethnic group satisfying but who is not permitted an unobstructed participation in the group to which he seeks alliance.

Mr. Fichter has given some attention to that considerably large number of people whom he identifies as marginal catholics.[13] These people Mr. Fichter thinks of as moving, one way or the other, through the shadowy perifery of two institutional-poles, the sacred and the secular. What are the recreation or play demands of the marginal man as compared with those of the non-marginal man? What are the play-styles most appropriate for a satisfying re-incorporation of the marginal man in the social process, and how can the play poverty of his existing relationships be relieved? To what extent is mobility (the dominant aspiration of the marginal man) related to types of leisure and recreation styles?[14] What is the significance of this relationship? That is, do racially and ethnically mar-

[11]David Riesman, *The Lonely Crowd* (New Haven: Yale University Press, 1950), pp. 307–325.

[12]Ralph Linton and Melville Herskovits, distinguished anthropologists, recently observed that a primary difficulty in transplanting western technology in Asia and Africa, via the Point Four program, has been the disdain of the natives for economic relations in which the element of play is voided. *The Progress of Underdeveloped Areas*, Bert F. Hoselitz, editor. (Chicago: University of Chicago Press, 1952), page 78 and page 92.

[13]Joseph Fitchter, "The Marginal Catholic: An Institutional Approach," *Social Forces* (December, 1953), pp. 167–172.

[14]Leonard Riesman, "Class, Leisure, and Social Participation," *American Sociological Review* (February, 1954), pp. 76–84.

ginal personalities, for instance, prefer those movies, however poorly made, for the primary reason that they deal with tolerance, as Mr. Riesman suggests?[15] These are only a few of the directions that research on the problems of play among marginal men may take.

It is not unlikely that one of the characteristics of contemporary culture of causal significance for the decline of play in the social process may be the deprecation of manners in present-day social relations. More than a hundred years ago, Emerson wrote that society "hates corners and sharp points of character, hates quarrelsome, egotistical, solitary and gloomy people; hates whatever can interfere with total blending of parties; whilst it values all peculiarities as in the highest degree refreshing, which can consist with good fellowship . . . The favorites of society, and what it calls 'whole souls,' are able men and of more spirit than wit, who have no uncomfortable egotism, but who fill the hour and the company; contented and contenting, at a marriage or a funeral, a ball or a jury, a water-party or a shooting match".[16]

Mr. Herskovits has suggested that the stream of culture which is predominantly that of the American Negro is richly endowed with the importance and accentuation of good manners; that these proper modes of behavior were not—could not have been—a product of American slavery, but constitute rather a survival that reaches back into the heritage of West Africa; and, accordingly, if they could be retained in their finest quality, these forms of respectful conduct might comprise a significant contribution to the contemporary social process.[17]

Using controlled and experimental groups, the significance of manners for the existence of play-forms in the social process might be understood via the method of interaction process analysis being pioneered by Mr. Bales.[18] Research designed in this way and conducted among a variety of cultures and classes may make one of the most important contributions to educational theory that we have had in a long while.

RESEARCH AND ELABORATION

Now, in discussing those realms of contemporary culture having to do with industrial relations, marginality and manners, we are attempting to illustrate how wide must be the empirical range of attack through research on the problem of play and, similarly, how significant may be the practical implications by, theoretically, viewing play as a functional and generic characteristic of the social

(*Continued on page 59*)

[15]David Riesman, *The Lonely Crowd*, *op. cit.*, p. 338.

[16]Ralph Waldo Emerson, "Manners", 1844. In *The Writings of Ralph Waldo Emerson*, Brooks Atkinson, Editor, (New York: Modern Library Ed., 1940), pp. 392–393.

[17]"The etiquette of the whites who lived in the Great House, though this may have been copied, was not observed by most Negroes, who were field hands; more often the whites who could be closely observed by the slaves were the small planters, the crudity of whose modes of behavior has been remarked by traveler after traveler in the Antebellum South. It is not easy, either, to see how the codes of behavior exacted of the slaves in the fields by their overseers were such as to inculcate the soft graciousness that so outstandingly characterizes the Negro's behavior. The importance of proper recognition of status, respect for elders, and the like is very great in West Africa itself; and it is here that one must look when considering points of origin". Melville Herskovits, "Education and Cultural Dynamics", in *Education and the Cultural Process* (Nashville, 1941), Charles S. Johnson, Editor, p. 121.

[18]Robert R. Bales, *Interaction Process Analysis* (Cambridge: Addison-Wesley Press, 1951).

NON-DELIBERATIVE FACTORS UNDERLYING THE PHENOMENON OF SCHOOLING

BY J. M. STEPHENS

THE ARGUMENT IN BRIEF

The general phenomenon of schooling demands to be explained as well as to be expedited. The general phenomenon of schooling is held to consist of the three-fold fact that schooling is widely prevalent; that it consists of a very definite kind of work, a work that has a loose but definite relation to the interests of the home or other primitive agencies; and that this specialized work of the schools has notable survival value. We could imagine this three-fold phenomenon to be due to deliberate human decisions and to deliberate efforts. We could also imagine it to be due to some process whereby certain activities (in art or science) become ends in themselves and spontaneously elicit for themselves the attention of a cheering section or group of zealots. It is the contention of this paper, that, operating along with the mechanisms just mentioned, there have been powerful, automatic, primitive, unintelligent forces which have also helped to bring about the process of schooling and to keep that process directed into survival-favoring channels.

There is little need to develop the first assumption: namely that schooling is widely prevalent and has existed in some form for a considerable period of time. Schools or near schools have been found in many periods of history and may well have been in existence prior to the historical era. Schooling or something like it has also appeared in many different parts of the globe and in widely differing cultures.

In our second assumption we suggest that the work of the school has differed systematically from that of the home and of other primitive agencies and that this specialized work of the school has had survival value. Typically there has appeared to be a fairly reasonable division of labor between the school on the one hand, and the home and similar primitive agencies on the other. By accident or design, the activities of the home have guaranteed that children will have a rough competence in such matters as eating, avoiding the more prevalent physical dangers, and in wearing clothes, whereas the school has typically devoted more attention to such things as singing, ceremonial dancing, ritualistic knot tying, memorization of tribal legends, numerical relations, or the interpretation of written symbols. Consciously or unconsciously, the school has developed and nurtured those ways of behaving which many primitive agencies would tend to neglect, permitting them to be pushed aside by the more compelling claims of matters of immediate significance.

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In fostering and nurturing these more decorative and less vital aspects of behavior, the school, unwittingly perhaps, has played a substantial part in the grim struggle for survival between one society and another. By concentrating on a vast number of these seemingly "useless" things, such as topology or electrostatics, and by inducing generation after generation to become familiar with the various nuances of the "scholastic" subjects, the school has helped develop a very few of the seemingly "useless" things to the point of tremendous practical return. In its fondness for the useless and decorative, the school has occasionally given its host society a terrific advantage over societies that refuse to tolerate dilletantism, or the pursuit of the impractical. Whatever its other virtues, the school has been a survival device which some societies evolved, or borrowed, or stumbled upon, or otherwise acquired during the remote past. In view of this long-term contribution to survival, it is not surprising to find some suggestion of schooling in many surviving societies.

DELIBERATE PLANNING AS THE EXPLANATION OF SCHOOLING

It might seem at first glance that the coordination of the school's functions with those of the more primitive agencies, and its remarkable contribution to long-term survival, must have been the result of extraordinary social planning. It might even seem that some super-agency has had in mind the traits which should be developed in children, and has then parcelled them out, giving some traits or tendencies to the home, others to various incidental agencies, and still others to the school. Certainly, at a less fanciful level, we could easily imagine that the home and other primitive agencies, seeing the limitations of their own provisions, may have deliberately set up the schools to take care of the important traits that would otherwise be neglected. Or as an alternative possibility, it is easy to suppose that potential teachers or other groups with specialized interests, aware of the neglect of those interests, have set themselves up as the agency to make good the defect. Either of these deliberate arrangements, or a combination of such definite plans, would explain the loose but effective articulation between the work of the school and the home, and the definite direction of the former.

It is no more than common sense to suggest that deliberate human intention had much to do with the evolution of schools. It seems most unlikely, however, that all societies were clearly aware of this long-range survival factor when they developed or stumbled upon the process of schooling. It is probable, on the contrary, that any great amount of insight was the exception. It is probable that few people, either in the schools or out, had any clear awareness that they were developing tendencies which might come in handy several hundred years hence. It is probable that the activities of the schools had to be justified on other grounds, these justifications undoubtedly ranging from the utilitarian to the outright mystical.

THE SCHOOL AS THE CUSTODIAN OF IMPORTANT BUT PERISHABLE 'GOODS'

Our stress on the considerable though remote survival value of certain seemingly useless tendencies must not mislead us into thinking that these tendencies were necessarily cherished on account of their survival value. Actually it would be very rare to find people contemplating the activities of the school and deliberately saying to themselves, "These activities, if further developed, may bring great dividends in the future. Therefore let us cultivate them carefully

for the sake of generations yet to come." On the contrary, we find that, for the most part, when these activities are cultivated they are typically cultivated as ends in themselves. To the artist and his patrons, art is not just one of many activities that might happen to have practical value centuries from now. Art, to its devotees, has its own essential value, not derivable from its potential utility, and is to be cultivated for the satisfaction of intrinsic human needs. Similarly, disinterested science is often considered to be valuable for its own sake. Its pursuit and study bring intrinsic satisfaction which is good in its own right.

Not only is it a fact that "useless" activities bring rich and genuine satisfaction in their own right, quite apart from their survival value, but it is most helpful that they should do so. Activities which bring direct and powerful satisfactions in and of themselves are more likely to be carried on with zeal and efficiency than those which are undertaken merely from a sense of duty to future generations. The continuation of the species, for instance, is more likely to be guaranteed through procreative activities which are enjoyable or attractive in their own right than through a sheer sense of obligation to acquire progeny.

We could, if we wished, formulate a theory at this level. We have held that it is in the interests of survival that these "remote" tendencies should be cultivated. We have also held that it is in the interests of survival that the games, the art, the science, and the other activities which these tendencies engender should be attractive in their own right. If we accept these points, we could then merely proceed to study the school as an institution for cultivating this special class of activities which may lack practical usefulness, but which have acknowledged intrinsic value, and which bring satisfaction to important human needs.

This latter approach is quite legitimate and is, essentially, the approach which is developed in the classical residual theory of education. In that theory the school is considered as an agency for the cultivation of traits which are clearly important but which, in the hurly-burly of everday life, are likely to be neglected by the home and by other agencies.

SCHOOLING AS THE AUTOMATIC OUTGROWTH OF SPONTANEOUS PRIMITIVE TENDENCIES

As an alternative (or supplement) to the two theories discussed above, we now suggest that along with the deliberate or quasi-deliberate forces, there may have been other automatic, spontaneous, unintelligent forces which helped to bring about the device of schooling and to keep it directed to long-range survival needs.

Our attitude at this stage is not unlike the possible attitude of a visitor from Mars who is studying the procreative activities and is concentrating on the obvious survival function of those activities. Our Martian inquirer might find that these procreative activities are accompanied by elaborate but varying rationales. In one culture the procreative activities may be considered as a means of acquiring descendants who will worship at the shrine of the procreator. In another culture these same activities may be part of an invocation to the gods. The members of a third culture may cite the Biblical injunction to be fruitful and multiply. Still other groups may regard procreative activity as a means of exorcising a daemon that temporarily possesses the soul.

Our Martian investigator might well assume that deliberate intention does play some part in these matters. But he might be wise if he were to consider the possible existence of primitive, non-deliberative procreative tendencies that also play a part in guaranteeing the continuance of the race. Such primitive tendencies, although somewhat affected by various rationales, would still operate under many differing rationales and would operate, indeed, even when the people concerned could give no rational explanation of their behavior.

School activities, of course, have none of the crucial importance to survival that we can attribute to procreative activities. But the schools do have some long-range survival value, and we may well wonder if the continuation of these survival-favoring features has, in the past, depended *exclusively* on anything as precarious as human deliberation. Deliberate intellectual decisions, which are assumed to play so important a part in our current civilized life, are probably of very recent origin and, even now, are not very reassuring guarantees for the continuation of anything really vital to survival. If we are to explain the school's contribution to survival during the remote periods of the past, we should look for some of the responsible forces in a group of blind, primitive tendencies which operated to produce schools prior to the development of elaborate deliberation, and which have operated successfully under extremely diverse rationales. To provide a convincing explanation of the schools we must place some of our reliance on forces which will work when deliberation is inadequate or non-existent —which will work, indeed, even when deliberation is perversely obstructional.

PRIMITIVE TENDENCIES UNDERLYING THE PHENOMENON OF SCHOOLING

It is held that schooling, or something like schooling, would automatically arise from the existence of a few clusters of primitive spontaneous tendencies. These postulated clusters are as follows:

1. A cluster of playful, manipulative tendencies whereby we are led to do many things that are usually of great interest but seldom of immediate practical use. This cluster includes such widespread tendencies as doodling, making marks in the sand, exploiting an echo, dropping rocks in pools of water, rearranging ideas, playing with word patterns, and working out numerical relations. These tendencies are held to have genuine survival value but a survival value which is remote rather than immediate and which is seldom apparent to those in whom they operate.

2. A cluster of spontaneous tendencies leading us to talk about things that we know—about the story we have heard, about our children, our pets, our hobbies, our illnesses, our trips, our thoughts.

3. A cluster of tendencies by which we are led upon occasion to tolerate, to approve, or even to applaud the manipulative behavior of others. Such toleration or applause is often spontaneously directed to acrobatics, singing, magic, or linguistic fluency.

4. Closely related to item 3 is a *converse cluster of tendencies* by which we are led spontaneously to express disapproval of awkward, inappropriate, or incorrect manipulatory behavior. We may express this disapproval by a shudder or grimace, or by a formal protest, or by a demonstration of the proper behavior.

5. A combination of clusters 2 and 4 which would lead to a cluster of tendencies to "point the moral," to say, "See what happens when you rush into premature publication," or "See how much better things are when you clear the equation of fractions before transposing."

6. A cluster of tendencies that lead us to tolerate, and perhaps to encourage, those who are heavily endowed with the "communicative" tendencies listed in items 2, 3, 4 and 5.

Our main task, of course, is to show that, to some extent, schooling may arise from the blind, automatic operation of a group of non-deliberate, spontaneous tendencies such as those just postulated. It is now necessary to show (1) that the clusters of tendencies are fairly widespread, though, of course, much more pronounced in some people than in others; (2) that such tendencies will operate even without deliberate, conscious intention to help, or to instruct, or to improve; and (3) that such tendencies, even if unaided by deliberate intention, would bring about some sort of schooling.

PREVALENCE OF THE POSTULATED TENDENCIES

Tendencies to Manipulate: The frivolous, playful, result-getting tendencies are extremely widespread. They are found in our primate cousins and in human beings of all ages. The young child crumples papers and topples blocks with obvious relish. His older brother smashes light bulbs or sends rocks skimming over the surface of the pond. Other members of the species send balls soaring through space, or delight in the results to be obtained from manipulating lures near pools or streams. At a more "intellectual" level, many people rearrange the letters in words, do interesting mathematical puzzles, or develop ingenious theories on a wide variety of subjects.

Tendencies to Hold Forth: The tendency to hold forth on a variety of subjects is also very widespread, though this tendency also is much more pronounced in some people than in others. With little persuasion, most people will speak to some extent about themselves, about their family, their hobbies, or their views, and some people will speak interminably on such topics.

Tendencies to Approve or Applaud: The tendencies to tolerate, or approve, or applaud manipulative behavior in others are also fairly prevalent, and are probably very ancient. Most people are impressed by some form of manipulatory skill when they see it in others. The acrobat, the medicine man, and the story-teller have enjoyed prestige among many different groups. For some groups these tendencies may run chiefly to applause for very obvious forms of physical manipulation. For other groups, they may take the form of veneration for a mastery of the esoteric, or for linguistic prowess. But they are usually present in some degree.

The widespread presence of these applauding tendencies is probably no mere accident. The emergence of such tendencies represented a definite step in the evolutionary process. It probably took quite a bit of evolving before people came to tolerate the trifling, frivolous behavior of others. It would not be suprising, indeed, if many members of the early tribes took an exceedingly dim view of the manipulative activities of their colleagues. The hard-pressed primitive groups may well have questioned the social contribution of the curious

one who amused himself throwing water on hot rocks, or who toyed with a rope-like vine when he could have been shaping flints or chasing rabbits. Not being seers, they could not foretell that the playful one was about to revolutionize the method of working rocks, or of snaring rabbits. Forbearance for triflers must have come hard to those sweating over the immediate tasks of the day. But such forbearance did come about in some species and it greatly helped such species to utilize the long-term survival value of these frivolous, manipulatory tendencies. Certainly, some toleration is quite prevalent in societies that survive at the moment.

Beyond mere tolerance, of course, comes the active approval and applause for manipulatory activities. The group which first carried its indulgent forbearance into spontaneous encouragement was also the first to take one more step toward the effective utilization of the survival value latent in these traits. The group who found themselves, for some strange reason, intrigued by the playful exploits of others, by the tales of the poet or the magic of the medicine man, would be more likely to survive than groups which gave mere grudging acceptance. This trait, too, is very widespread.

Tendencies to Correct: The tendency to express dismay, consternation, or disapproval at the awkward or incorrect manipulative behavior of others is also widespread and is also much more strongly entrenched in some people than in others. The prevalence of this tendency is perhaps shown by the deliberate efforts often applied to keep it in check. Rules and sanctions are continually enjoined to keep us from gasping at the overturned teacup, from commenting on our friend's inappropriate attire, or from correcting his faulty grammar.

The tendency to point the moral, to say, "I told you so", again, is frequently seen among us. Like some of the tendencies just mentioned, it is in fact so much a part of our makeup that many societies have erected taboos against it.

Tendency to Tolerate the Primitive Teacher: As has been suggested, toleration for the unusually "communicative" person is sometimes of a grudging nature. Typically we are not too happy when we ourselves must listen to a detailed account of our companion's esoteric hobbies, or when he comments on our own manipulatory deficiencies, or when he sharpens our insight into the reasons for our ineptitude. But we are more indulgent, or perhaps moderately enthusiastic, when the one who oozes information, corrections, or maxims applies himself to others, especially if those others stand in obvious need of the treatment being given. Presumably even in primitive groups there was some forbearance or perhaps support, for the oldster who took advantage of the more defenceless members of the group to tell them of the old days, to correct their off-key chant, or show how a violation of the tribal law brings its own retribution.

THE SPONTANEITY OF THE POSTULATED TENDENCIES

Do these tendencies operate spontaneously? Would they function adequately in a group of people who lacked any conception of the survival value of such tendencies? Probably so. Probably, the boy who rattles the stick along the paling fence has no vision that this is one of the tendencies by which his species has fiddled and doodled its way into its present pre-eminence, and by which his descendants may achieve even more fantastic control of the environment. The man who is impelled to give you a detailed account of the book he has read is also probably completely oblivious of the fact that this urge has long-range

survival value. The spectator who gazes in awe at the colored magic which the priest can induce in the camp-fire does not know that his appreciation or applause also pushes his species a little ahead of less effusive groups. The adult who feels impelled to correct the child's off-key chant probably does so as blindly as the rest. He merely feels uncomfortable in the presence of improper manipulation, and he acts. In so doing, he helps perpetuate manipulative tendencies which in some distant day may mean salvation for his descendants. But of this he probably knows nothing. The society which tolerates or encourages this primitive teacher also thereby adds to the long-time chances of survival, but again it probably does so with little realization that the encouragement has survival value.

It is not suggested, of course, that these activities are always completely lacking in deliberation. It is obvious that people may talk of their hobbies or their interests for the deliberate purpose of helping their hearers, or of accomplishing some other laudable aim. The man who tells you all about his operation, for instance, may believe that he can pass along some information that may be useful to you. But this is not always the case, or necessarily the case. Sometimes he just babbles. He is driven by some undeliberate, unintellectual tendency to talk, and he talks. He is sometimes the victim of that spontaneous unreasoning drive which leads the returning traveller, even as the gangplank falls, to look frantically for a pair of ears into which he can pour forth his experiences. He may merely belong to that group of people for whom an unshared experience is no experience at all. A story heard but untold leaves him in acute distress. It must be remembered, of course, that this spontaneous compulsion to tell others the things we know is much stronger in some people than in others. Most of us could sort our acquaintances into some rough ranking with respect to this trait. At the one extreme is the friend whom we avoid for some time after he has returned from his trip. We make a point not to lunch with him the day after he has been to the theater. We hope the book he has just read is interesting—and brief. At the other extreme, of course, is the unduly "secretive" person, the partaker of the solitary, intellectual delights. Most of us probably come somewhere between these two extremes.

The tendency to correct the mistakes of others may also, upon occasion, spring from a deliberate intention to help the erring one. But again this is not always true or necessarily true. In the margins of books no one else will ever see, we pen corrections to authors already dead. We correct spelling errors in examination books that will never be returned. Hearing the grammatical slip we mutter the correction but deliberately keep it under our breath. Many of our corrections that actually do reach the ears of others are probably equally devoid of deliberate, rational intention to help. Often there is absolutely nothing altruistic about them. We hear the mistake and, spontaneously—automatically—helplessly, wince, or supply the correct phrase, or shriek in outraged protest. Even when we feel that our comment may hurt rather than help, we are sometimes powerless to resist, and the spontaneous tendency to comment on the mistake wins out in the face of a deliberate resolve to mind our own business.

In this trait, as in the others, we may expect marked individual differences. At the one extreme are those we just can't keep quiet in the presence of error, irrespective of the harm or good that may follow from speaking out, and at the other extreme are those who can be aware of serious dereliction and feel no compulsion whatever to speak out or correct.

THE POWER OF THE POSTULATED TENDENCIES TO PRODUCE SCHOOLING

If we grant the existence of these spontaneous tendencies, together with the individual differences that are also postulated, then something like schooling seems inevitable. From among those who are unusually endowed with manipulative tendencies, there would be some who are also strongly compelled to speak of what they know. Such people, of course, would tend to direct their efforts to any available audience. It would be amazing, however, if a disproportionate part of their hearers did not happen to be drawn from those too young or too timid to escape. Children constitute a natural captive audience of this kind especially if there is in the background the indulgent permission or blessing of parents. (Postulate 6) The ancient mariner may well have "shared his experiences" with accessible 8-year olds if all the startled wedding guests had succeeded in giving him the slip.

Among the adults who are unthinkingly impelled to hold forth on "academic" matters, there would be some who, driven by similar blind, unreasoning compulsions, would also commend behavior that pleased them and correct those things that worried them. Many of these, in turn, would be spontaneously impelled to point the moral and to show why this result follows from that way of doing things.

The activities just outlined constitute a crude form of schooling. Here, for instance, we have the adult who, because of his own great interest in tribal history, talks to young people about tribal history. His remarks occasionally lead them to express themselves on the same subject. Some of their remarks he unthinkingly accepts and others he rejects. Such a one has taken a considerable step toward the teaching of tribal history, even though he may never have had the slightest intention to teach.

To the student of a social phenomenon, such as schooling, these powerful, primitive tendencies that motivate the snail watcher, the bore, and the compulsive "corrector" must not be taken lightly nor brushed aside as merely interesting or laughable human foibles. These tendencies, so prevalent and so characteristic of our species, have enabled our ancestors to develop a host of seemingly useless "academic" activities to the point where a very few of these tendencies have produced tremendous survival returns. It is claimed that these blind primitive forces are exceedingly dependable agencies for nurturing such academic matters and for capturing their sporadic, long-range survival value.

No attempt has been made to work out the detailed mechanisms by which these postulated tendencies have been handed on. *In general*, of course, our possession of these traits is adequately explained by the fact that the societies who happened to be endowed with these clusters of tendencies were able, in the exceedingly long run, to "out-compete" the societies who lacked such tendencies.

These clusters of primitive tendencies, so clearly prevalent in our day, and presumably prevalent in the past, would provide the basic forces necessary for a crude form of schooling. Those blind, undeliberate forces, at work in the past, would account for the continuity of schooling and for its prevalence in different cultures. These steady primitive tendencies, still functioning in our more elaborate schools, would also account for a certain constancy in the work of the school that has persisted in spite of widely differing rationales, justifications, or deliberate pressures.

Just as these unthinking, spontaneous tendencies played a part in producing the schools of the past, so they must still contribute a hidden, earthy substratum to the more elaborate schools of the present. Our many deliberate efforts to direct and refine the process of schooling must be imposed on these spontaneous tendencies that will continue to operate no matter which ideology may inspire our rational decisions.

These primitive, spontaneous tendencies are charter members among the forces that lead to schooling. They deserve more serious study. At the very least we should seek to know how much scholastic growth would follow from these forces acting on their own and in the absence of any intention to teach. It would also help to know how much deliberate intervention is required to "trigger off" larger applications of these primitive forces, and to know the extent to which these forces are responsive to direction, facilitation, or attempts at inhibition. All in all it would seem that our deliberate efforts might be more intelligently applied if we had a clearer idea of the primitive, non-deliberative forces already at work.

WORLD-VIEW OF JOHN DEWEY

(*Continued from page 9*)

between the idea that by means of language we are made to share in objective or public meaning and the idea that language serves only as an instrument in directing the other person into such covert behavior as the background of his conditioning together with the total uniqueness which incoming neural discharges will sustain. When one speaks to another he does no more than set air waves in motion. When these beat in an orderly manner upon the eardrums of an organism which has been conditioned to the language involved the brain takes on a condition of mindedness which is a character of its natural self as modified by its former behavior. Hence, the images and meanings which result are unique and private. All the images, aims, and purposes that exist belong exclusively to persons. Even the light which attends the seeing of an object (subjective object to beg the question) is exclusively private, the momentary state of brain mindedness. What the physicist describes as light is, in strict language, quantum behavior and not light. And once matter is conceived as the material naturalist conceives it to exist it is no longer necessary to conceive of meanings, including the meaning of light as it attends seeing, as objectively out-there affairs. But such is subjectivism and epistemological solipsism and fortunately or unfortunately there is no choice but so to conceive affairs if one accepts the substance reality of the physical world in the materialist's sense of substance. In denying all substance Dewey avoids epistemological solipsism but the price paid is the loss of human-centered purpose, freedom and creativity. Thus the seafaring thinker is caught between Scylla and Charybdis if he attempts to select his world-view upon the pragmatic ground that the consequences of believing and acting upon belief determine the truth weight which possible alternative views may have. I, for one, find nothing unfavorable to the individual or contradictory to the democratic social order in the belief that man creates what he knows and knows only himself, especially when the alternative view implies the demise of man. To conceive of man as a creative force in his own right is logically to give him the highest possible status. And, unless there is some very good reason why we should think of man as less we have no pragmatic warrant for doing so.

PRE-WAR EDUCATIONAL THEORY IN YUGOSLAVIA

BY JOSEPH S. ROUCEK

History

The present state of Yugoslavia is a direct descendent of the Kingdom of the Serb-Croats-Slovenes, founded on December 1, 1918, not an altogether new state, but the consequence of the historical development of the three main groups of the Yugoslav people. Upon the foundation of the Kingdom, the following territories joined the union as component parts: the Kingdom of Serbia; the Kingdom of Montenegro; and the Yugoslav countries under the former Austro-Hungarian Monarchy; Croatia with Slavonia, Dalmatia (a former Austrian crown colony), and a joint Austro-Hungarian province of Bosnia and Herzegovinal Kranjerska; that province of Slovenia which had been under Austria; with a part of Stajerska, and the Voivodina, which had been directly under Hungarian administration.

Ethnically the people who formed the new state were predominantly Yugoslavs (83%); their historical names being: Serbs, Croats, and Slovenes. Having common ethnographic characteristics, being of the same race and speaking the same language (although writing it differently), Serbs, Croats, and Slovenes therefore are one people with three names. The difference in their names is rooted in the fact that originally they came to the Balkans from their common fatherland, not together, but in different alien cultures and political influences and therefore developed independently from one another. This historical development explains the fact that Serbs are mostly Greek-Orthodox, while Croats and Slovenes are mostly Roman-Catholics. Moreover, the Serbs retained together with their religion that Cyrillic alphabet used by all Slav people belonging to the Eastern Church.

That part of Yugoslavia known as Slovenia was settled by the Slavs in the sixth century. They were ruled by their own tribal princes for a short time only. Then they came under the Avars; from the eight century on, by the Germans; then Austria dominated Slovenia . . . except for the short period from 1809–1813 when it formed a part of the Kingdom of Illyria, created by Napoleon . . . until 1918. The Slovenes successfully resisted the Germanization process and developed their own culture and their own national consciousness.

The Croats also came to the Balkan peninsula in the sixth century, and occupied the territory east of the Slovenes. For the first three hundred years they lived in districts governed by their own tribal princes, subjected at first to the Avars, then to the Franks, and finally to Byzantium. Later they created,

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on the Adriatic coast, their own state governed by native princes. Tomislav, the first King of Croatia (925) enlarged this state considerably and it remained so until 1102 when, because of the disagreements between Croat nobles, the Hungarians penetrated into the territory. Peter Svachitch, the last of the Croat kings was deposed and Croatia at first retained its independence, more or less, but in the end it became a vassal of Hungary. In the beginning of the sixteenth century, the Turks conquered a part of Hungary and a large part of Croatia. After the liberation from the Turks, the Croats came under the Hapsburgs who were at the same time kings of Hungary. The Croats failed to liberate themselves from the Austro-Hungarian yoke, but resistance resulted eventually in a certain amount of autonomy granted in 1868 to Croatia and Slavonia; this state of affairs lasted until 1918.

Dalmatia, the cradle of the old Croat State, changed masters several times. Until the fifteenth century, it was a component part of the Croat and the Hungaro-Croat state respectively. In the fifteenth century, some of its coast towns and the islands were conquered by Venice. The interior was later taken by the Turks. From the beginning of the nineteenth century and until 1918, Dalmatia was an Austrian province. There, the city of Dubrovnik with its environs was, in the Middle Ages and all along till 1808, an independent republic; it was the greatest commercial center of the Yugoslav people. In 1808 the Republic of Dubrovnik was conquered by Napoleon and in 1814 by Austria who joined it to the rest of Dalmatia.

The Serbs began coming to the Balkan Peninsula in the seventh century; they inhabited the parts east of the Croats and gradually penetrated more and more into the east and south. In the ninth century they organized a strong state. But a powerful Serb state came into existence only under the Grand Zupan Nemanja in the second half of the twelfth century. Actual systematic activity in favor of national liberation and union had its origin in Serbia, and namely in 1804 when Karadjodje of Serbia (1752–1817) gathered his people and led an uprising against the Turks and freed a part of Serbia. From that time, Serbia became a Piedmont around which gathered all Yugoslav nationalistic ambitions. In 1882 Serbia became a Kingdom.

The wave of nationalism, following the French revolution, formed a ready echo among the various branches of the Yugoslav people. In Croatia, this rejuvenation began with a movement under the leadership of Ljudevit Gaj, who led the "Illyrian" movement. Its ideology rejected the tribal names and adopted the common denomination of "Illyrian", in the erroneous suppositon that the Yugoslavs were descendents of the ancient Illyrians who had inhabited these territories before the Yugoslavs. The "Illyrians" revived and strengthened the idea of Yugoslav unity, particularly among the Yugoslavs living under the Austro-Hungarian monarchy. To the same end worked, on the other side, men like Dositeje Obredovic and Vuk Karedzic, as well as the Montenegrin Bishop Peter II . . . all creators of modern Serbian literature.

In the second half of the nineteenth century, the Yugoslav movement, as well as separatist tribal movements of the Yugoslav branches, were intensified. Croatia had the memories of an old Diet, with its own complicated feudal law, and traditions of the Croat Crown. In 1847 the Croat Diet, in its last Latin revolution (the language used on the Diet up to that time) made the "Croatian-

Slavonian language" the national tongue, antagonized by the Magyarization policy of the Hungarian government. The country also had the benefit of a professional middle class in Zagreb, with a modern outlook and modern education. The University of Zagreb was founded in 1847. A national policy was promoted by Bishop Strossmajer of Zagreb, who promoted the South Slav idea. While Oaj, the founder of Illyrianism had stressed only the common language, Strossmajer envisioned a common culture and a common past; trying to overcome the historical, religious, and ideological differences between the Serbs, Croats, and Slovenes; the Serbs were Orthodox, with a great but Russian past; the Croats and Slovenes were Roman Catholics. Croatia recalled its "historic" statehood, while Slovenia was part of Austria. The Serbs had been oppressed by both Turks and Hungarians, but could boast of an independent state, and pointed out with pride to their centuries-old struggle for freedom against both. But the Croats had fought for the Hapsburgs and some leaders hoped to regain their "rights" under Hapsburg auspices; they despised the "barbarous" Serbs and their uncouth Balkan ways. In the cultural sphere, the Croat intellectuals were trained in a distorted German cultural and Catholic background, while most Serb intellectuals acquired their culture from Paris.[1] As Catholics, Groats and Slovenes received their inspiration also from Rome, and many of the Croat leaders were ecclesiastical leaders as well. Zagreb, ancient and obstinately self-assertive Croat center, despised Belgrade, a "barbaric" and a Greek Orthodox town. The Catholic Croats and Slovenes used the Roman alphabet and resented the Serbs, writing in Cyrillic, and who identified their religion with their nationalism. A comparison of the percentage of illiterates, much lower in Croatia than in Serbia, provided another argument for the Croat educated under the influence of Vienna and Venice. The Serb, in turn, detested Zagreb with its Hapsburg and Catholic baroque facades; his sufferings and sacrifices during the past centuries imbued him with an obsession for his nationalistic cause.

Obviously, the Yugoslavs were separated by their past. "The South Slav idea was an intellectual creation, and not the outcome of a national development."[2] Strossmajer tried to unite his people by the manufacture of a common culture. Under his leadership the Croats founded an academy . . . a very strong weapon in the national struggle . . . naming it the South Slav Academy; the Zagreb middle class was convinced and the city became the birthplace of the South Slav movement.[3] The Serbs, on the other hand, already having their own state, wanted simply to extend the borders of their country, and considered the South Slav idea as a weapon to that end.

When a Bosnian youth, Princip, assassinated in Sarajevo the Austro-Hungarian Crown Prince Franz Ferdinand, Austria-Hungary declared war on Serbia . . . thus starting World War I, which culminated in the dissolution of the Hapsburg monarchy and the formation of the Kingdom of Serbia-Croats-Slovenes in 1918.

The educational history of Yugoslavia before 1918 resembled closely the

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[1]For more information see: Joseph S. Roucek, *Balkan Politics* (Stanford University Press, 1948), IV, "Yugoslavia," pp. 79–124.

[2]A. J. P. Talor, *The Hapsburg Monarchy, 1809–1918* (London: Hamilton, 1951), p. 190.

[3]The oldest Academy of the Slavs is the Russian one, founded in 1726; the next is the South Slav Academy of Science, founded by Bishop Strossmajer, in 1860 and opened in 1867, it changed its name during World War II to the Croatian Academy. The Polish Academy was formed in 1872, the Serbian in 1886, the Czech in 1890, the Bulgarian in 1911, the Ukranian in 1919, the White-Russian in 1928, the Slovak in 1938, and the Slovenian in 1940.

difficult conditions faced by the various Yugoslav branches under different rulers. Illiteracy was high everywhere. In fact, the "Black George" the liberator and first ruler of Serbia, was an illiterate who could sign official documents only by making a rude cross. The conditions were worse in the Northern districts, where the somewhat more enlightened rule of Austria had permitted education at a much earlier date; but more than 94% of the people were illiterate. But in spite of the higher degree of literacy in the northern sections, only 54.8% of the national populace as a whole could read and write in 1918.

EDUCATION IN SERBIA

The history of formal education in Serbia can be traced to St. Sava, even today worshipped among the Serbs of all the Serbian provinces as the Patron Saint of the School.[4] He was the first Archbishop of Serbia. The youngest son of Nstephan Nemanya, the first sovereign of the united Serbian provinces, was originally named Rastko, and his baptismal name was St. Sava (or St. Sabbes, born 1171–1236). Thanks to him the Serbian church became autonomous and was raised to the dignity of a Patriarchate; he formed nine Bishoprics in the Kingdom, and supported schools and education.[5] It is worthwhile to note also that he had joined the Monks at Mount Athos, which at that time was not only a republic composed entirely of monasteries and monks, but also the highest divinity school of the Eastern Orthodox Church. Here he became a monk (Sava) and a few years later induced his father, the King, to resign the throne and finish his days as a monk in the "Holy Mount" (Svata Gora). Here both of them built up a Serbian monastery which, during the 12th and 13th centuries became the high divinity institution for the Serbian theologies and ecclesiastics and the metropolis of the Serbian learning and literature.[6]

From these times on, the monasteries became the center of education of whatever form of instruction they offered to Serbia's youth. In some places, as in the Mount Athos monastery, or in Studenica, they offered higher educational forms of instruction. The monks also ran city and private schools. Serbia's law of the 14th century provided that all villages should have schools. But the children of richer parents received all forms of higher education in Constantinople and Dubrovnik. After the subjugation of Serbia by the Turks, all public schools were closed and only church schools remained. During the loss of national independence, the Serbia under the Austrian rule fared better than the sections under the Turks. Under the Austrian regime they were allowed to form trivial schools; a gymnasium and seminar were founded at Karlovac. The gymnasium in Novy Sad, where the first Director was P. J. Safarik (1795–1861), a noted Slovak scholar, gained for the city the reputation of being a Serbian Athens.

The first outstanding pedagogue of Serbia was Dositej Obradovic (1742–1811), one of the first South Slavic philosophers, and the first Serbian author to proclaim the principle that the language "as it is spoken" should be the cultivated one,

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[4]Paul R. Radosavljevich, *Who Are the Slavs?* (Boston: Richard G. Badger, 1919), Vol. II, p. 30.

[5]St. Sava also the most celebrated writer of Serbia of the 12th century, writing on the Church discipline and Church rules and regulations; his most famous contribution was his *Life of St. Simon*, his own royal father, who, on becoming a monk, took the name of Simon.

[6]Radosavljevich, *op. cit.*, p. 31.

and "not a jargon overloaded with archaic and supposed classical forms."[7] This "Lomonosov of the Yugoslav Renaissance," according to Manning, a product of the period of Enlightenment studied as a monk in the Greek theological schools and later as a layman in Germany, Vienna, and England.[8] At the end of his life, he became the first Serb Minister of Education in the government of Kara George. He inaugurated the national education of his people, stressing the need for school instruction and self-education. Believing that the vernacular could be raised to the dignity of a literacy language, he published Serbian national songs and poems, demonstrating that the language spoken by the mass of the people could be used for book writing. But he studied the Serbian language also as a means of acquiring and imparting information.

Although he wrote no special educational works, in his numerous studies, mostly translations, compilations, and adaptations from other languages, he tried to impart moral instruction and in particular to combat clericalism, monasticism, wanting to instruct his countrymen by his own example. Above all he wanted to impart moral instruction, propagating especially the ideas of German Philanthropism, in addition to the ideas of Montaigne and Locke; he knew Rousseau only through other works and as adopted by the Germans. Education, for him, should start early and be given to all members of the nation, should aim at the perfection of man, and the intellectual aspects of education should not surpass the education of the heart and the habit of obedience. In the spirit of the time, he believed that man is good and that there are no limits to the power of education. Agreeing with Fenelon he wanted to also educate girls. In general, Obradovic had more influence on the schools' organization as a national awakener than the proponent of the new educational theories, none of which were original. But it was important that he tried to replace the domination of the Russian and old Slavic languages by the national Serbian language. In this respect, he exerted a considerable influence on the Bulgarians and Romanians.

The democratic idea that the masses be given education was propounded by another distinguished Serbian, Vuk Karadzic (1787–1864), who resembled Obradovic only in the scantiness of his formal school training. Born in Serbia under Turkish rule and under humble circumstances, he made use of such educational opportunities as he could secure, first in Serbia and Croatia, and after the success of Kara George's first revolt, at the newly formed High School of Belgrade. The temporary loss of Serbia's liberty in 1813 forced him to flee to Vienna where he became acquainted with Jerney Kopitark, a native of the lands included in the short-lived Illyrian Provinces (1809–1813) and one of the leading proponents of "Illyrianism." He influenced Karadzic that the Illyrian idea needed one vernacular spoken by the whole Yugoslav people; the results were remarkable. During the subsequent 50 years of his life, Karadzic published a dictionary, fixed the forms of the Literary language at the time, and became a mine of information of Yugoslav folk-lore, customs, and traditions. His collections of national songs, and heroic poetry created sensational attention in the Germany of Grimm and Goethe and in Western Europe, and helped the revival of nationalistic pride. Finally, by his reform of the current orthography and by the re-

[7]Radosavljevich, *op. cit.*, Vol. I, p. 235.

[8]C. Manning, "Literature of Balkan Slavs," Chapter XXII, pp. 512–531, in L. I. Strakhovsky, (ed.) *A Handbook of Slavic Studies* (Cambridge, Mass: Harvard University Press, 1949), p. 518.

construction of the alphabet in Cyrillic characters but on strictly phonetic lines, he helped the strikingly rapid diffusion of education in Serbia.[9] He helped to advance the intellectual levels for Serbia, and thus make Belgrade the center of the intellectual capital of the Serbs. The dialect of Belgrade became the language of the Serbian government and of Serbian literature in general.

A recognition for the promotion of the organization of Serbian schools must also be given to Dimitrij Matic (born 1821), Minister of Education, and founder of the first normal school in Serbia; he incorporated his experiences as Professor, Minister, and a member of the State School Commission in the three columns on education. His contemporary, Djordje Natishevitch (1821–1887) prepared several handbooks for teachers. Zivojin Khujovic (1840–1870) tried to introduce into Serbia's education the ideas of Russian nationalists and Slavophils (especially of Pisarev, Pirogov, and Chenishevsky).

The first complete education law of Serbia was passed in 1848 . . . and revised in 1857, 1863, and especially in 1882 when, thanks to Stoyan Novakovic, President of the Serbian Academy of Sciences, a compulsory attendance of public schools for six years was introduced, together with continuation schools, the training of teachers extended, and supervision of schools formed. In 1857 the communal responsibility of education was transferred to the state which, thereafter, tried to improve the deplorable conditions of education—nearly two-thirds of the communities being without schools. But in 1898 Minister Dordevic took a backward step when he decreed the "depolitization" of the teachers who in the struggle between the masses and the landlords took sides with the peasantry. In short, between 1874 and 1889, only some 180 elementary schools had been established, although the number of pupils had nearly doubled.

With the installation of Peter Karageorgevic, Minister Davidovic introduced a new school law in 1904. It founded kindergarten schools for children from the age of four to seven, especially in the districts of foreign minorities where the attendance of these institutions was obligatory; in the places where at least twenty-five pupils were registered, higher elementary two-year classes were formed; agrarian and trade continuation schools were formed also. Compulsory education was decreed between the ages of seven and thirteen, and the schools were supported by school districts and the help of the state. Teachers had to be graduates of four-year normal schools. But, on the whole, the general conditions of the educational system up to World War I had been very unsatisfactory. There was a general lack of schools, and some pupils had to travel fifteen kilometers to attend a school, and had to be fed in a communal kitchen supported by the food products brought by them. Continuation school, although provided for by the law, did not exist; the attendance was miserable and poor students were generally excused from attendance; health conditions were also unsatisfactory. There was a lack of qualified teachers, since the profession was paid less than the gendarmes. Serbian teachers even lacked the right to vote, had no right to vacations, and their health leave of absence was limited to two months. The efforts at reform were interrupted by World War. I.

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[9]For more information on Karadzic, see: G. R. Noyes, "The Serbo-Croatian Language," Chapter XVI, pp. 279–301, and especially pp. 296–299, in R. J. Kerner, Ed., *Yugoslavia* (Berkeley, Calif.: University of California, 1949).

The first so-called "High School" in Serbia was opened in 1808, but it was closed in 1813 with the fall of Serbian independence. In 1815, Serbia again freed herself and obtained, while still under Turkey, a certain autonomy. In organizing the new state, the foundation of schools was undertaken. A secondary school was opened in Belgrade in 1830, and was transferred in 1838 to Kragujevac with the title of a "gymnasium"; in it were taught philosophy, history, mathematics, statistics, the German language, and drawing. In 1841 a law department was opened and in that year the school was transferred to Belgrade. In the '30's several other kinds of secondary institutions opened.

The Belgrade institution flourished during the following years, but as time went on it became more and more apparent that the teaching was primitively organized and the supply of teachers insufficient and unsatisfactory. The idea of founding a real university gained momentum. In 1863 the school moved into a larger building, the gift of Captain Misha Anastasievic, which still houses a part of the University. In 1878, the Congress of Berlin granted Serbia complete independence; one of the first things the government planned for was the foundation of a modern university. In the ferment of the difficult political situation, however, the High School was completely deprived of its autonomy. The law of 1898 introduced important changes in the constitution and work of the High School. Teaching in the faculties was divided into branches of kindred subjects, laboratories were set up, and notable advances were made toward a real university standard. Faculty councils were instituted. The High School soon became an important institution producing government officials. The political changes in Serbia in 1903 led to the passing of the act of February 27, 1905, which resulted in the opening of the University on October 2 of that year. Although most Serbian students preferred to get their degrees abroad, the University saw a vigorous development until 1914. On August 19, 1914, fourteen Austrian shells struck the University building and worked havoc. The work of the institution was suspended for the next five years.

Meanwhile, Serbia's secondary schools continued to appear in increasing numbers after 1886, especially "Real Schools" without Latin. The admission examinations were introduced in 1873 and maturity examinations in 1876. The reorganization of the secondary schools in 1898 provided, in theory, for three kinds of secondary schools, but in actual practice, classical gymnasiums were mostly transformed into real gymnasiums. The last classical gymnasium, attached as a small branch to the Belgrade gymnasium, was closed in 1902 for the lack of pupils. The gymnasium had either eight years of classes, or four years or six years of offerings.

In addition to gymnasiums, there were eight secondary schools for girls, the oldest of which was that of Belgrade, opened in 1863, with three and later six years training. The professional and technical training was of poor character. The church institutions accepted the pupils from the fourth year of elementary school and gave them nine years of training in institutions (internats). There was a private music training school, a private industrial training school, and a commercial academy in Belgrade, three state trade schools, and a few agricultural and wine-schools. Serbia's specialty was a school for the training of physical education teachers in the secondary schools as well as elementary and university

students. There was also a Military Academy in Belgrade and state military school in Kragujevac.

EDUCATION IN MONTENEGRO

As early as 1493, only a few decades after the invention of printing, a printing press was established at Cetinje (Montenegro); but it ceased to exist very soon, since the Turks attacked the country and the people had to remold the letters into weapons. Centuries of oppression followed. In the 19th century, there were only a few religious institutions for the training of clergy, and a sort of university in Cetinje (capital) which was closed from time to time, especially during the war periods, and had no organized curriculum. The poverty of the country did not allow Prince Nicholas to found too many elementary schools during the '60's. There were no teachers, no schools, and no textbooks. The war of independence exhausted all the means of the country, allowing no surplus for education. The Ministry of Education was founded in 1878 and the educational law of 1884 was passed, but all these reforms remained nearly entirely on paper. Some improvement appeared only at the turn of the 20th century. In 1905 the Educational Commission (*Prosvjetni savjet*) of seven members was formed, imitating the Serbian example; it introduced a professional supervision of state inspectors (two). Under Minister Ivan Plamensc a new school law was passed in 1907, but it never came into effect due to the Balkan Wars and World War I. During World War I, the Austrian occupational authorities tried to replace the use of Latin by Cyrillic in the elementary schools, and tried to open schools for Albanian children, without much luck.

EDUCATION IN SLOVENIA

The first attempt to democratize education in Slovenia related to the "Academia Operosorum", founded in Ljubljana in 1893. To the circle of the *Operosi* belonged, among others, P. Hipolit, who translated Komensky's *Orbis Pictus* into Slovenian. In the second half of the 18th century, a large group of influential writers known as the "precursors of the Slovene regeneration," which promoted popularization of empiric science and propagated enlightenment and education, was formed in Ljubljana. But it was only in the second half of the 18th century that there began a marked sign of spiritual regeneration and the beginning of true modern education. The contemporary rationalistic and philosophical ideas had found their way into the South Slav lands.

The Slovenes, purely Catholics, and living in the north-western periphery of the Yugoslav ethnical community tried to resist the aggressive Germanization policies of the Austro-Hungarian government. Under the name of the "Slovene regenerations" a group of cultural workers tried and laid the foundations of Slovene cultural development at the end of the 18th century. The dynamo of this movement was Baron Ziga Zois (1747–1810) who helped financially a group of authors interested in the development of Slovene literature, and the poet, Valentin Vodnik (1757–1819), whose poems, however simple, welcomed the formation of the Kingdom of Illyria by Napoleon and saw in it the glorification and revivication of Illyria. He wrote the first textbooks in the Slovene language. The originator of the democratic aspects of the school system of Slovenia was Bishop Anton Martin Slomsek (1800–1862), Bishop of Levant, who saw in the

church and the school the two chief agencies for the moral and national regeneration and instructive books for popular consumption.

Slomsek was Director of the spiritual seminar of the Orthodox Church at Celovec, and later Bishop at Maribor. His priests were sincerely devoted to him; he never ceased preaching to them to help the promotion of public and adult education, whose level was low, and which he had known as a former school teacher. His activities attracted Baron Lev Thun, Minister of Education, who instructed him to write several textbooks for Slovenian schools. In the spirit of the time, he tried to indoctrinate the teachers with religious spirit, aiming at having them both cooperate in his popular periodical, *Drobtinice*. He, himself, authored some forty educational essays, designed for teachers and the general public. Pestalozzi's influence is especially seen in his best work, *Blaze in Nezica v Nedeljsko Soli*, wherein, in the form of a novel, children Blazej and his sister Nezica, tell their parents about the examples of goodness and simplicity while attending the continuation Sunday school; actually this is a popular survey of the educational curriculum in fifty-two lessons.

Ondrej Einspieler (1813–1888), a Catholic educator and author of didactic works, taught religion in the Real School of Celova. He helped, with Slomsek, to found in 1851 the Association of St. Mohor for the publication of inexpensive Slovenian books. After 1852, he edited *Bolkis projatelj* (*Friend of the School*) (later titled *Slovenski Prijatelj*), where he published his sermons as well as several discourses on education; he participated in political life as a conservative. The spirit of the Orthodox Church was also represented by another priest, Janez Azman (born 1842) who published, in Ljubljana, *Krscanska izreja* (*Christian Education*).

A progressive tendency was represented by teacher Andrej Prapotnik (1827–1895), for many years a leader of the Crain teachers and their representatives in the Land Educational Commission and a productive writer of books for youth and people. In 1861 he founded his own organ, *Uciteljski Tovaris* (*Educational Worker*), which defended the right of the Slovenian language in the school against the national traitors. He was no educational theoretician, but published a number of good methodical and didactic works (ABC books, song books, mathematical handbooks, etc.).

When, at the end of the 19th century, a clerical party began to attack the Slovenian schools and teachers for their secular tendencies, *Uciteljski Tovaris* published after World War I, and next to the Croat periodical, *Napretka*, the oldest educational periodical of the Slavs, changed its program and began to defend the teachers against these reactionary tendencies. Its place for the promotion of scientific education was taken by the review *Popotnik*, which systematically surveyed foreign educational literature and promoted religious tolerance.

Before World War I, there were few Slovenian independent educational theoretical studies. Since many Slovenes published their contributions in German, they have been identified among the Austro-German educators . . . as well known cartographer Kosenn, and mathematical didactician Mecnik. In 1901, the "Slovencka Solska Matica," (Slovenian Mother of Education)—resembling Bohemia's *Detictor Komenskeho* (*Komensky's Heritage*)—started publishing an education work and a Pedagogical Annual. In addition, the "Pedafosko Drustvo"

formed in 1886 in Krek, helped to develop educational aims. Its activity of twenty-five years was described in detail in its publication, *Ob petindvajset letnici Pedagoskago drustva v Krekem.* Among the best contributors to the history of Slovenia's education were Revnikar and Josip Apih (1853–1921).

An important factor in the educational cross-currents of Slovenia was the influence of Dr. Thomas G. Masaryk, Professor in the Charles University of Prague, on the educational and political thought of both the Croats and Slovenes; the Slovenes especially had many relatives among the Czechs.

Masaryk, as Professor of Philosophy in the University, exerted a dominant influence not only among the Czechs and Slovaks, but also among all other Slavs, especially the Yugoslavs. He believed that the Hapsburg Monarchy should be revitalized and could survive if its policies were based on honesty and popular will, instead of on intrigue and dynastic interest. He hated Pan-Slavism and saw Pan-Slavism as another weapon of Russian Czardom, which would lead to the breach with the western civilization. He tried to make Prague the center of a Democratic Slav culture, and developed numerous friendships with the Serb-Croat leaders. In his insistence on truth in science and politics, in his call for a deeper religious life, in his emphasis that small nationalities could survive only by higher morality and better education, he formulated an attractive ideology for his people (as well as the Yugoslavs).[10]

Masaryk exerted his far-reaching influence in Prague, since most Slovene intellectuals had no chance to study in their home country. There was no University of Slovenia until 1919, although some form of university education in Ljubljana dated from the end of the 16th century. At their collegium, founded in 1596, the Jesuits held higher courses in theology and philosophy and granted academic degrees. After the dissolution of the Jesuits hold in 1773, the collegium was turned into a lyceum. In 1874 the theological faculty was transferred to Innsbruck and the faculty of philosophy was closed. Determined protest from the Slovenians resulted in the opening in Ljubljana in 1788 of a faculty of philosophy, and in 1791 of a faculty of theology and a department of surgery.

A temporary University was realized in Ljubljana during the time of Napoleon's Illyria. Through the initiative of Marmont, Marchal of the Illyrian Provinces, the lyceum was turned into a "central school" in 1810, with the character of a full university and faculties of philosophy, jurisprudence, medicine, and theology. It gave university degrees and existed until 1814. The return of the Austrians again lowered its status; most of its faculties were closed and it lost the right of giving university degrees.

After various changes the Austrian school reform of 1849 finally abolished the lyceum of Ljubljana. On renewal of Slovene demands there was founded in 1859 in Gratz a cathedral for Slovene language and literature and a number of scholarships were granted to Slovene students. But it was only in July, 1919, that the University of Ljubljana was established with faculties of theology, law, philosophy, technology, and medicine.

[10]See: Joseph S. Roucek, "Czechoslovak Sociology," pp. 717–731, and "Sociology in Yugoslavia," pp. 740–745, in Georgas Gurvitch & Wilbert E. Moore, Eds., *Twentieth Century Sociology* (New York: Philosophical Library, 1945).

EDUCATION IN CROATIA

Masaryk's influence was also important in Croatia. His ideas were first diffused by a group of Croatian students who, having taken part in political disturbances in Croatia in 1895 were obliged to complete their studies at the Czech University in Prague. In fact, Masaryk helped weaken the animosity between the Serbs and Croats in Croatia at the end of the century; his liberal views and practical policy had promoted the idea that the Yugoslavs had to cooperate if the Magyarization policy of the Hungarian government was to be resisted successfully.

These ideas were but the continuation of the nationalistic efforts to use the school for the nationalistic rejuvenation. One of the most distinguished names here is that of a famed Croatian national worker and writer, Ljudevit Gaj (1809–1872), a skillfull politician, lawyer, journalist, and excellent orator and organizer; a man of personal magnetism, who inspired a large number of young Croat intellectuals for the ideals of the Illyric movement. He helped to transform the Croatian cultural life and accomplished a national and literary renaissance of his people by his abolition of Karadzic's vernacular and the phoenetic alphabet with the Latin letters.[11] He reformed Croatian orthography on the basis of the Serbian one. But his efforts to form a common literary language under the name of "Illyrian" by fusing Serbo-Croatian and the Slovene language were not successful; at any rate, he standardized the Croat language and helped to have it adopted for modern literature. He had numerous able and faithful pupils who promoted the consciousness that the Croats were members of the Slavic race. The poetic form of this idea was given to Peter Preradovic (1818–1872) and Stanko Vraz (1810–1851) who were among the first most talented on this group of inspired writers who, in one form or another, glorified the ancient Illyrians on the assumption that they were the ancestors of the Croats and Slovenes. They stressed that the concept of national education included also the cultivation of the national traditions, folkways and mores, and songs. Not the Latin, but the mother tongue was to be used by the schools.

But the man who did the most for the cultural elevation of the Croat masses in the middle of the 19th century was the Croat Bishop Josji Juraj Strossmajer (1815–1905), whose slogan "through education to liberty," created for the Croats a firm base for a healthy and many-sided cultural development.[12] This distinguished churchman, best known in Western Europe for his opposition to the declaration of Papal Infallibility in the Vatican Council of 1869–1870, was a brilliant man, who wrote with facility in French, German, and Italian as well. A recognized leader of the opposition to Magyar domination in Croatia, he founded the South Slavonic Academy in Zagreb (Agram, 1867), and laid the foundations

[11]For more information, See: J. Kerner, Ed., *Yugoslavia*, *op. cit.*, pp. 37, 222, 300, 311, 319; and L. I. Strakohovsky, Ed., *A Handbook of Slavic Studies* (Cambridge, Mass.: Harvard University Press, 1949), pp. 276, 519, 520; and Paul R. Radosavljevich, *Who are the Slavs?* (Boston: Richard Badger, 1919), Vol. I, pp. 196, 282, 496, Vol. II, p. 241.

[12]How the ideological elements influence even the renowned scholars is seen from the fact that there is no mention whatever in the well-known and highly praised history of education by Otakar Kadner, *Dejiny Pedagogiky*, (*History of the Pedagogy*) (Prague: Ceska grificka unie, 1923), Vol. III, Part I, pp. 324–341. For additional information on Strossmayer, see: Radosavljevich, *op. cit.*, Vol. II, pp. 39, 54, 241, 249, 254, 364, 521; Joseph S. Roucek, Ed., *Slavonic Encyclopaedia* (New York: Philosophical Library, 1949), p. 1257.

of a basic higher education and of advanced scholarship in Croatia. Above all it was his ideal to have South-Slavs enter into a union with the Catholic Church. He was also in correspondence with Prince Michel of Serbia, with Michael, Metropolitan of Belgrade, and with Gladstone. As the great Croatian Bishop he gave a living example to several other Slav Bishops who sided with their clergy in the national struggle of the Croats.[13]

As a result of his endeavors, the Zagreb University enjoyed the services of distinguished Yugoslav scholars; the Academy published valuable collections of historical documents and standard editions of the older Croat poets. Research naturally tended to favor national history, antiquities, and literature. The first President of the Academy, Dr. Franjo Racki, set a high standard of historical criticism and also sustained Strossmajer's conception of the institution as a center of Yugoslav and not merely Croat culture. Strossmajer also encouraged the study of the old Slav liturgy known as the Glagolitic rite, which had served in various parts of his diocese and of neighboring lands, and secured for it the sympathy of the Pope Leo XIII.

As far as the educational conditions of Croatia were concerned, the poor conditions of the Croatian educational system required, at the time, more practical steps in accomplishing these nationalistic aims than any lengthy theoretical discussions. Hence, these nationalists began to write the much needed elementary textbooks, inspired by nationalistic feelings. Janko Jurkovic (1827–1864) helped the reorganization of the Croatian schools in 1874. In Dalmatia the most merit for helping the educational development goes to a journalist and politician, Dr. Mitro Klaic (1829–1896).[14] The Croats were lucky that they soon had several good organizers of national education, such as Ivan Filipovic, the author of many works of youth, handbooks and dictionaries, who founded the Croat Pedagogical Literary Association in 1871, and the Croatian Teacher's Home in Zagreb. These organizations, associated with the Association of Croat Teachers and the Croat Educational Museum, promoted the publication of numerous educational works, and the translations of Comenius, Spencer, Rousseau, and Pestalozzi, Rabelais, publishing an *Educational Encyclopaedia.*

[13]For more details, see: Radosavljevich, *op. cit.*, Vol. II, pp. 39–40.

[14]Among them were: Nikols Hadzic (1791–1871); Franjo Klaic (1819–1887); Milan Kobali (1840–1897); Matije Mesic (1836–1878); Vjenceslav Novak (1859–1905); Josep Partas (1820–1864) etc.

POSTULATIONAL SYSTEMS: GATEWAYS TO UNDERSTANDING

BY EARL C. CUNNINGHAM

PROLOGUE

If one could abstract from the records of intellectual history one continuing invariant it would be that dealing with man's persistent and unquenchable belief that reliable knowledge and understanding are possible. . . .

The writer would describe this persistent belief as the most remarkable of all the remarkable projections of the human mind. Perhaps it is due to prior conditioning, but most of us, when we *think* adventure or when we want to share vicariously in the adventures of others, turn to such things as physical exploits predicated on brawn or brute strength; or upon travel and explorations with their concomitants of novelty and excitement; or, if we are still young mentally, to science fiction with its astounding array of imaginary characters and situations. . . . But the writer returns to his original premise: the greatest adventure story ever written—demanding its peculiar type of (intellectual) daring, calling for its peculiar brand of fortitude and courage—is this relentless attempt to penetrate with understanding this *mysterious tremenduum* we call the cosmos.

If the ones reading these pages react to them in a fashion similar to the reactions of the writer in preparing them, they will become increasingly and acutely conscious that the whole knowledge enterprise moves in a world of shadows, of assumptions, of postulates, of givens—a shadow world of unreality, where all systems may be wrong and where it is impossible to certify any one as right. . . .

It is this very tenuousness of the quest for knowledge—its hypothetical and provisional character; its element of shadowy unreality; its perennial aloofness to certification—that makes its continuing pursuit the most remarkable of all the remarkable projections of the human mind. It is the adventure story *par excellence*. Perhaps man's restless quest for understanding is analogous to the lines written concerning Abraham in his search for God (man wistfully seeking for knowledge is like Abraham seeking for God). Of Abraham it was written:

> By faith Abraham, when he was called to go out into a place which he should afterwards receive as an inheritance, obeyed; *and he went out, not knowing whither he went. By faith he sojourned in the land of promise, as in a strange country. . . .* For he looked for a city which hath foundations, whose maker and builder is God.

It is not the purpose of this paper to trace the particular attempts of men to penetrate this *mysterious tremenduum*. The stories are too long and too involved for a brief statement—anyway, these particular stories are available in multitudes of books dealing with the history of ideas. . . . The concern of this paper lies in other directions. It is primarily concerned with exploring and setting forth the logic underlying the whole system building enterprise. In a

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secondary and derivative sense the paper is concerned with the how and why of postulational systems; and with the origin and extent and certainty of the kinds of knowledge which postulational systems yield.

POSTULATIONAL SYSTEMS

The statement that knowledge is not a unitary thing may seem far-fetched to the reader. But to speak of *the* body of knowledge would be to miss the whole point of this study—rather than *the* body of knowledge there are *bodies* of knowledge; rather than *the* truth there are *systems* of truth; rather than *the* philosophy of the state, there are *philosophies* of the state; rather than *the* philosophy of religion, there are *philosophies* of religion; rather than *the* meaning of happiness, there are the *meanings* of happiness, rather than *the* philosophy of history, there are *philosophies* of history; rather than *the* system of ethics, there are *systems* of ethics, etc.

The reader may ask, "How can it be that truth is such a variable? That the 'good' may be so variously (and legitimately) conceived? That happiness can mean so many different things?"

To answer the above questions demands that an analysis be made of the psychological and logical factors operating in the system-building enterprise.

PSYCHOLOGICAL FACTORS IN SYSTEM BUILDING

When the animal we know as "man" emerged in the evolutionary process, he had no given standards or guide-posts by which to chart his course in establishing institutions that would yield such things as the good, the true, and the beautiful. Perhaps it would be a matter of conjecture concerning the period of time, historically conceived, that was required before man even raised issues concerning the nature of such things as the good and the true. But somewhere in his development, probably through trial and error experience, he began making naive distinctions between true and false, right and wrong, beautiful and ugly, the real and appearances. And once this process of making distinctions emerged, the changing flux and flow of experience became a sufficient cause to produce modifications and refinements in the distinctions themselves.

Again, in the distinction-making process, we are reminded that both men and their environments differ. This means that fundamental attitudes—ways of looking at things—differ among different men. For examples: Two men, conventionally speaking, stand on the same earth, looking into the same night sky, gazing at the same planets and stars—One man, the psalmist, is enraptured by what he sees and sings, " . . . the heavens declare the glory of God and the firmament showeth his handiwork," and proceeds to build a God-centered universe; the other man, Democritus, enraptured by the same data, writes of an infinite concourse of atoms swinging their inexorable, mechanical and necessary way through a self-contained eternity, and he proceeds to project a philosophy of materialism wherein all that exists is matter and all that happens is motion. Again, two men stand side by side observing the bloody progress of a conquering army: One, Jesus, recoils and is shocked at man's inhumanity to man and proceeds to project a philosophy of love and mercy and kindness—epitomized in the commandment that "Thou shalt love the Lord thy God with all thy heart . . . and

thy neighbor as thyself;" the other, Nietzsche, reacting to the same data, projects an affirmation of the Superman, exulting in the fact that through conflict and conquest and power the Superman emerges and comes into his own. Or still again, two men become concerned with the problem of the sanctions of human conduct: One, Plato, seeing only disaster ahead for a system of values built on the shifting and unstable foundations of relativity, wrote of a transcendent world of immutable "Ideas" which stand as the eternal and absolute form around which *the* ethical system must be built; the other, Dewey, seeing only disaster ahead for a society which seeks to build its ethical norms around static, other-worldy concepts, wrote that "Morals are not a catalogue of acts nor a set of rules to be applied like drugstore prescriptions or cookbook recipes . . . " and then proceeded to build his sanction of morality upon the concept of satisfactory consequences.

Thus far in our analysis of postulational systems we have established two propositions:[1] One, that man began his earthly saga without any "highway markers" to guide him in his intellectual development; and two, that men differ by temperament and experience, which differences impel them toward demanding different kinds of "worlds".

To the above two propositions we add another concept which seems to operate with particular potency in the system building process. The reader is asked to subject himself to the following introspective analysis: What happens to you psychologically when you accept or reject a given proposition as true or false? Suppose you are given the simple proposition that "The car approaching you is traveling at a speed of sixty miles an hour." You are asked to affirm or deny this statement. Your data is limited to direct observation only. Regardless of the answer you give, do you base your answer strictly on proof and nothing else? Or is there something else, such as a feeling-overtone, intuition, or a subtle psychological "something" that impels you to answer in a given manner? Actually, in forming a judgment on the above proposition, you do not have sufficient proof to yield a certain answer. There is some psychological factor operating beyond the factual data which impels one to give or withhold assent. In this analysis we are not concerned with the exact definition or origin of this "something", but only that the reader detect in his introspective analysis that a phenomenon of this nature is operating when he forms judgments.

Historically, Cardinal Newman, in his book *A Grammer of Assent*, called this psychological phenomenon the Illative Sense, and defined it as a faculty which enables one to affirm a proposition when such affirmation far exceeds "the assignable media of perceiving." He termed it a non-rational element of assent. Data are convincing to one only if he is willing to be convinced. John Locke described this same phenomenon as a "surplusage of belief over proof." William James recognized the same phenomenon in his essay, *The Will to Believe.*

The reader should keep strictly in mind that at this point in this analysis no evaluation is made concerning the reliability of this "non-rational assent" phenomenon in forming judgments. It is stressed only that it appears to be operative in judgment formation.

[1]It should be apparent to the reader that these propositions are conjectural and hence, postulational in nature.

Now if we pull these three above concepts together we seem to be pointing toward some vital psychological principles operating in human minds which can be projected as explanatory ideas in accounting for the system-building process. . . .

One further step and we have completed the psychological factors which are operative in system building. Man is a question–asking and a problem-solving animal. The entire intellectual history of man, in a broad sense, is an attempt to answer persistent questions; attempts to delve into the unknown that it may become known; attempts to push back intellectual frontiers so that man's understanding may become wider and more comprehensive.

Now the kinds of answers that individual men ask and the types of solutions that they come to accept ultimately can be traced back to their sources in human need. On the one hand, the terrific complex of social, cultural, and racial conditioning plays its part in determining the types of questions asked and the types of answers demanded. On the other hand, this subtle psychological given, which Newman calls "assent" and which Locke terms "surplusage of belief over proof", also operates powerfully both in the question forming and answer making enterprise.

We began our analysis of the psychological aspects of the system-building enterprise with the proposition that in the beginning of his intellectual development man had no "highway markers" to guide him toward ultimate and final judgments. . . . If one gives assent to this statement, what kinds of answers to his questions is one going to accept? Obviously, the ones that are most satisfying to his total personality makeup (which includes both environmental and organismic factors).

The kinds of questions which men have asked and around which they have built their systems, have appeared with remarkable persistency throughout man's intellectual history. In philosophy one finds four basic questions: *One*, the question of ontology, which deals with the problems of the nature of reality—What is the ultimate source of everything? What is the fundamental substance from which all things are derived? *Two*, the question of epistemology, which asks, What is truth? Is it a constant or a variable, etc? *Three*, the question of ethics, which asks, What is the good? And, *four*, the question of aesthetics which asks, What is the beautiful?

In attempts to find answers to these persistent questions, men project certain explanatory schemes which philosophers call "systems", or more fully, "postulational systems". In the pages which follow we want to do three things: One, to indicate something of the nature of the logical structure of the system-building enterprise; two, to point out some inferences which seem to follow of necessity from this logical structure; and three, to state some general assumptions which underlie all systems as well as some specific assumptions found in particular systems.

LOGICAL AND INFERENTIAL STRUCTURE OF SYSTEMS

It was pointed out in the above section that man began his intellectual development without any given standards which would inevitably enable him to distinguish between truth and error, right and wrong, beautiful and ugly, etc. . . . This is by no means a recent or novel insight. Plato (427 B.C.–347 B.C.) was highly aware of the tenuous nature of knowledge concerning reality. He used

a figure of speech which epitomizes the core problem of the system-building enterprise: Man is imprisoned in a cave with his back to the light. He cannot see directly the objects which pass before the mouth of the cave but must rely on the shadows which play upon the wall as the bases for his construction of reality. This is the problem of the system builder: He seeks to weave meaning and understanding into the world of shadows which constitutes the "wall" of raw experience. From this shadow-world he attempts to wring reliable standards of knowledge, reliable standards of conduct, reliable standards of aesthetics, etc., all in order the better to orient himself to the multifold realities of existence.

It is generally recognized by philosophers that non-reflective experience long predates the actual formation of systems. Early man lived in a world which made insistent demands upon him. For example, the struggle for existence imposed its daily imperatives upon him which he had to meet or perish. Primitive man probably met these practical needs in a trial-and-error, haphazard manner. System building, in general, comes only after a great body of practical experience has been accumulated. Of the historical aspects of system-building Cunningham writes:[2]

> "The builder of a system knows well the details of the science he attempts to systematize—he is acquainted with the 'facts' . . . and he wishes to show how these facts are the results of certain *principles*. In the case of the development of a more or less unified method of dealing with facts and of organizing facts into some kind of unity, progress has occurred along with the widening interests and problems of a people. Arithmetic, for example, grew with the needs of commerce, surveying, and the like. Long after a theoretical interest arose in arithmetic, science was born. . . . It seems that most of our present sciences . . . originated and developed partially in the practical, haphazard fashion. Practical systems arise out of the needs for action. After certain demands have been met, after the environment is somewhat conquered, man has time to look back over his achievements and to examine them as objects of interest in their own right."

It would be most difficult, if not impossible, to point to exact periods in man's intellectual history when he began insisting upon various specific controls. But the significant "fact" for this study is that man gradually came to prefer certified knowledge, i.e., knowledge according to principles, over impressionistic opinion. Uncontrolled impressions and inferences gradually yielded to consciously established standards.

A system arises when a given method is introduced into a body of materials. Once a method for handling materials is systematized, then "facts" and "truths" derive their certification by virtue of satisfying the demands of the method. For example, somewhere in ancient Greek philosophy the assumption of contradiction came to be an accepted method in handling the truth relations between given types of propositions. For example, given as true that All men are mortal, then the proposition Some men are-not mortal must be interpreted as false. . . . Now when the student of logic seeks to prove this principle of contradiction he may verbalize somewhat as follows: "The rule of contradiction in logic states that when one proposition stands in a contradictory relation to another proposition and one proposition is given as true the other must be false." If driven into

[2]H. E. Cunningham, *Textbook in Logic* (New York: The Macmillan Co., 1924), p. 370.

further proof the student would be compelled to assert that the logical law of contradiction holds because men have agreed to operate according to this principle. If one reasons according to this assumption then he is reasoning accurately, but if he reasons otherwise than this, he is reasoning erroneously. Let us add, he is reasoning erroneously in the light of a given type of assumption only!

Now the big question here is—Where do men get these assumptions which underlie systems of knowledge? The answer is, to think at all, one must begin somewhere. Now this somewhere is located in the assumptions which men make. Why do men make one set of assumptions rather than another set? The answer to this probably lies in the psychological factors mentioned in an earlier section of this study. By temperament or disposition or conditioning men ask certain types of questions and demand certain types of answers. Thus in setting their assumptions, postulates, they select principles which seem most in harmony with their inner demands for plausibility or certainty. In the final analysis system builders arbitrarily adopt the assumptions which they feel are most likely to yield the type of world-veiw which their temperaments apparently demand.

A specific example of assumptions underlying a dominant philosophical system in the western world may help us in our understanding the underlying logic of *all* systems. The philosopher, Plato, lived between the years 427 B.C.–347 B.C. He lived in a time of great intellectual ferment. Immediately before and during Plato's time a group of Greek thinkers known as Sophists had become a very disturbing element in Greek thought. They were skeptical men whose ideas were at wide variance with the thinking of Plato. For example, the Sophists taught that laws were made by those in power for the purpose of keeping themselves in power; that the Greek citizen should examine political laws before assenting to them and that if they were inimical to his interests he should ignore them. Again, the Sophists taught that standards of conduct (moral codes) were relative only to the peoples who made them—that there was nothing absolute or binding about them. Still again, the Sophists taught that man had created his gods—not the gods men—and the Sophists laughed at the superstitious Greeks for worshipping the gods of their own creation.

Now Plato was greatly disturbed, in particular, about the Sophist's insistence upon the relativity of morals. Plato thought he could see only destruction ahead for a society which viewed moral codes as relative and shifting. Moral standards must be grounded on absolute and permanent standards, said Plato. He proceeded to built a system, based on assumptions, which would provide for immutable standards of conduct. Let us examine some of his assumptions.

First, he assumed that "somewhere in the heavens" existed a perfect world of Ideas or Forms. For every common noun in the actual world of experience there was a corresponding Idea or Form in the perfect world. In fact, the common nouns in the actual world were organized and formed after the models in the perfect world. Further, in the actual world the common noun had come to stand for classes of things—man, tree, dog, horse, bird, etc. In fact, standing for a class is what makes a common noun common, i.e., common to a type. Now this type found in the actual world is patterned after the Idea found in the perfect world. Moral standards in the actual world derive their meaning by virtue of being copies of moral standards found in the perfect world of Ideas or Forms.

Through reason we know that real moral standards are permanent, absolute, and imposed upon us from without. Plato doesn't prove this; he begins with it as a postulate; as an assumption; as a given.

Second, he assumed that prior to the existence of the actual world, matter existed as sheer potentiality or capacity to become if and when acted upon by some actualized (kinetic) outside force. How did he know that matter existed, and that it had the characteristics which he attributed to it? He arbitrarily assumed it as one of the building blocks in his system.

Third, Plato assumed the existence of a creative force which he named the Demiurge. Did he know the Demiurge existed? Could he prove it? Neither did he "know" nor could he prove the existence of the Demiurge. He arbitrarily assumed this as another building block in his system. The Demiurge was a necessary postulate to get the perfect world of Ideas and Forms into relation with the world of potential matter so that the potential world could become the actual world of experience.

Fourth, another of Plato's assumptions was that reason will yield an adequate and accurate picture of the real world. His reason yielded to him the above assumptions.

Given these fundamental postulates or assumptions he was literally "on his way" to building a universe that would be responsive to his inner need. He concludes that the actual world is a shadow world—that the things of experience are not as they seem—and that the real world is that which the reason penetrates and which yields us absolute truth and absolute standards of conduct.

From this very sketchy and incomplete analysis of Plato's system we are able to abstract some characteristics which are common to, or are implicit in, all systems. To these characteristics we now turn:

First, every system begins with as few a number of basic assumptions as is possible to support either a general or specific world-view. These assumptions are not defined nor are they amenable to proof except through circularity of argument. Some writers symbolize these undefined assumptions as "primitive ideas"; other writers term them "axioms"; still others name them "postulates". Of these postulates, Cunningham writes, " . . . it should be stated that postulates or axioms are apparently . . . agreements . . . which we make at the outset in order to get started . . ."

A second general characteristic of postulational systems is the principle of consistency.[3] Basic assumptions of a system must not lead to contradictory conclusions. For example, suppose I posit as my metaphysical assumption the principle of change, flux, process, alteration, impermanence. Such a postulate points me away from certain other postulates as well as demanding that I accept still other ones. Suppose further that I want to include a system of ethics within my general system but that I find the postulate of relativism, which is consistent

[3]Consistency is a form of non-contradiction. As such it would not be a necessary postulate in modern empirical logic which assumes that there are situations in which contradictory propositions can both be affirmed—e.g.—The earth is both at rest and in motion simultaneously. At rest in terms of itself; in motion in relation to the universe.

with my metaphysical postulate of process, repugnant. I want an ethical system built on absolute, unshifting principles. Now the principle of consistency seems to be violated if I make such contradictory assumptions in my metaphysics and ethics. It seems further that if I wish to build a system which will appeal to men of intelligence I must either change my metaphysical assumption of process, or change my ethical assumption of absolutism. I apparently cannot have both impermanence and permanence and still have my system. It should be apparent to the reader that the principle of consistency applies only to a set of assumptions within a given, specific system and that it has no application when considering the assumptions of other systems.

A third characteristic of postulational systems relates to their possible numbers and kinds. There can be as many systems as there are people capable of and desirous of building them. By their very natures each system will be different from others in basic assumptions. Most readers of this material were probably reared on the familiar notion in geometry that "a straight line is the shortest distance between two points." This is true in one system but does not hold for all systems. In another case (system) a curved line is the shortest distance. Such concepts depend upon the basic assumptions underlying a system. We can have as many geometries as we desire so long as we satisfy logical structure in building our system.[4]

In the fourth place, a system need have no necessary relationship to the actual world. While it is true that most system builders probably think of their systems as *the* means of explaining reality most completely, in the final analysis the position is taken here that assumptions or presuppositions are not abstracted from nature but are imposed upon nature by the system builder. The assumption of a system builder that the system explains nature may or may not be accurate. Since there is no way of certifying such an assumption, then either to assert or deny seems irrelevant.

The fifth consideration relating to postulational systems is concerned with the problem of truth. Now, again, most of us were taught that truth was some genuine objective entity to which we attached ourselves or which we figuratively picked up and expropriated for our purposes, like we would dig a diamond from the ground or gather roses from a bush. Analysis of the system building enterprise makes one aware that one does not enter into the postulational system able to recognize and know the truth. The system builder himself does not know what the truth is until he has set his assumptions or definitions for determining it. "Truth" then becomes such only by definition.[5]

Some general examples and one relatively lengthy analysis may serve to make the above assertion more understandable. Euclid's famous axiom of "parallel lines extending to infinity" is familiar to the reader. For centuries this was seen not as an assumption but as a fact of nature. In recent relativity physics, an assumption is made that space is curved. Now if this assumption is accepted,

[4]This last sentence should be explored rather thoroughly to determine if it is not also an assumption regarding the nature of systems.

[5]An ironic situation arises if this concept of "truth-by-definition" is placed against an assumption of contemporary semantics that *definitions have no truth value*!

then parallel lines will bend in upon themselves and meet. Obviously, the truth concerning parallel lines cannot be determined until we know the assumptions or definitions postulated.[6] Again, examine the "straight line" postulate of Euclid. This is true only be definition and within Euclid's system. Relativity physicists postulate that light travels in a curved space. Hence a curved line becomes the shortest distance. Let us take a very simple example to indicate ambiguity in the concept "shortest distance", and to indicate how still another postulate could be made: I am standing on one side of the turbulent flood waters of the Mississippi River. I must get across to the other side. I can see my destination point. The river is wide, the current is rapid, the water is deep. I have no way to get across but to swim, and I can't swim. Five miles north of my position there is a bridge across which I can walk with safety. I walk the five miles up the river, cross the bridge, walk down stream five miles and reach my destination. In this situation, the shortest distance between two points is defined as "that way which enables one to move from one point to another with a maximum of efficiency and in a minimum of space-time." If I were a system builder I would have the logical right to assume this as my definition of "shortest distance". And it would be as true as any other, i.e., within my system; false in relation to other systems. Two further spot examples: An historic "fact" is not any happening in the past, but a happening which can meet postulated standards of certification. In general, a "fact" for the physical scientist can become so only if it can meet the most rigid postulates among which are rules governing observation, experimentation, and verification.

Finally, truth does not exist prior to a system. It is an outgrowth of the system and whatever validity it has resides within the system. There seems to be no other kind of truth.

The sixth and last consideration in this analysis regarding systems relates to the question of the general or limited nature of systems. The general system seeks a set of postulates which appear able to deal with the entire range of human experience—including such intangibles as man's hopes and aspirations in this or other worlds; his search for the good, as this expresses itself in theories of the state and theories of value. In the general system no vital area of experience is omitted. Medieval Christianity and its theological descendants are excellent examples of general systems. The specific system limits itself to certain areas of experience. Modern physical science is probably the best example of a limited system. By postulation, science rules out of its scope all phenomena which cannot be verified through some of the five senses.[7] Science makes no claim to being a general system.

[6]It is fascinating to observe that these two postulates lead to entirely different world-views: The Euclidian postulate to a *straight-line*, infinite universe, without limits; the relativity postulate leads to a curved universe which Sir James Jeans describes as "boundless but finite."

[7]This postulate harbors a perplexing paradox: Since science admits only into its system those phenomena which can be verified by the senses, and since this postulate cannot be verified through the senses, then what?

TYPES OF GENERAL AND SPECIFIC ASSUMPTIONS

General Assumptions: Every system aims at explanation—understanding. System builders start with a complex of unorganized data upon which they impose method. Even at this level assumptions are operative, either consciously or unconsciously. First, it is assumed by the system builder that knowledge is possible. This cannot be known prior to its postulation. Second, it is assumed by the system builder that the data of experience—when organized, systematized, and structured according to pre-determined postulates—are more reliable than when unorganized, non-systematized, non-structured, or impressionistic. Neither of these assumptions is amenable to proof. They are necessary conditions underlying the explanatory enterprise.

There are other general postulates underlying all systems. One of these is that nature is intelligible; that it has a determinate pattern which falls before thought. A further extension of this postulate is another which assumes that the world is the same for all observers. Still another general postulate is that intelligible communication is possible. . . . It must be apparent that none of these can be proved to be correct, because in the very act of proving one must assume these postulates in order to begin the process of proof.

Specific Assumptions: In this section we are to examine some of the assumptions underlying modern science and to survey some further assumptions found in the particular systems of selected philosophers.

Some Scientific Postulates: It is necessary to preface our discussion on scientific postulates by stressing that science is not a unitary system—i.e.—all scientists do not operate on an identical set of postulates; that there are "schools" of scientific thought, each with its own set of postulates or assumptions; and that the postulates of one "school" may stand in contradiction, in some respects, to the postulates of another "school". An analysis of these "schools" within science is beyond the scope of this study, though some postulates of different "schools" will be indicated.

In considering some postulates of science, we are reminded that all scientists must consciously or unconsciously accept the general postulates given in the previous section. These are fundamental to any system. There are other assumptions, however, which are unique to the sciences. In the following paragraphs we indicate some of these, with a sentence of explanation for each:

1. *Nature is uniform.* This assumption lies at the heart of the scientific enterprise. The aim of science is to explain the world we live in. To do this it is essential that the scientist have confidence in the harmony or uniformity of nature. He must postulate that physical laws revealed to him on earth are universal laws—i.e.—applying to the whole universe. Newton phrased this in 1687 when he wrote, "The motions of bodies in a given space are the same among themselves, whether that space is at rest or moves uniformly forward in a straight line." This is known as the Newtonian Relativity Principle. It can profitably be rephrased into a more general postulate: Mechanical laws which are valid in one place are equally valid in any other place which moves uniformly relative to the first. Einstein's special Theory of Relativity incorporates this principle while expanding upon it: All the phenomena of nature, all the laws of nature, are the same in all systems that move uniformly relative to one another.

Further, the whole framework of scientific prediction—of anticipating the future—is predicated on this postulate of uniformity.

Lastly, uniformity cannot be proved; it must be accepted as a working hypothesis or assumption.

2. *The nature of the world as given by scientific description.* By no means is there unanimity of agreement among scientists concerning the nature of scientific description. The problem may be stated in this fashion: "What is the nature of scientific description?" Very simply, what is involved in describing some object of experience? We indicate the assumptions of five specialists in the field of the philosophy of science:

a. *The scientific realist:*

Our knowledge of reality is not a conceptual structure, forever suspended over things, and based solely on conventions and definitions created for the purpose of thought economy; it offers us a picture of reality; that is, of an objective body of facts already existing before all knowledge; a picture which is becoming more and more adequate.[8]

b. *Strict empiricism:*

In answering the question, What is a molecule or atom?—which is assumed to be the basic stuff of the universe. One scientist-philosopher writes:

"We often analyze the materials of sense-impressions into elements which are not themselves capable of forming distinct sense impressions; we reach conceptions which are not capable of direct verification of the senses; that is to say, we can never, or at least we cannot at present, assert that the elements have objective reality. Thus physicists reduce the groups of sense impressions which we term material substances to the elements *molecule* and *atom*, and discuss the motion of these elements, *which have never been, and perhaps can never become, direct sense impressions. No physicist ever saw or felt an individual atom. . . . Atoms and molecules are intellectual conceptions by the aid of which physicists classify phenomena. . . .* "[9]

c. *The constructionalist:*

The constructionalist insists that "knowing makes a difference" in an object. The knower is active and selective in description, and in spite of himself, reads himself into his descriptions. E. W. Hobson is a representative of the constructionalist school. Laws (scientific) are not discovered, but constructed. He writes:

"The discovery or rather construction, of a scientific law involves that synthetic activity of thought which manifests itself in a constructive process in which actual percepts are employed only as a raw material and starting point, of the mental process."[10]

[8]B. Bavink, *The Natural Sciences* (New York: Translated from German by H. Stefford Hatfield, 1932), p. 256.

[9]K. Pearson, *Grammar of Science* (London: J. M. Dent and Sons, Ltd., 1937), pp. 95–96. (italics not in original)

[10]E. W. Hobson, *The Domain of Natural Science* (Cambridge, England: The University Press, 1923), p. 28.

d. *Conventionalism:*

What does one's description (concept) of an object (the world) amount to? It is primarily a mental operation, suggested by the data, but with no ascertainable correspondence to the subject described. Thus the description can no longer be labeled as true or false, but as *convenient or inconvenient.* For this school of scientists, Poincare writes, "The scientific fact is only the crude fact translated into a convenient language."[11]

e. *Logical Positivism:*

In general, the logical positivist divorces scientific description from any known correspondence with the objects of sense-experience. "Science is an elaborate and organized instrument for anticipating and controlling sense impressions."[12]

3. Knowledge is limited to observable, verifiable facts and their interrelations. Scientific knowledge is public in its nature. This means that any competent person, utilizing the same controls and procedures, can reproduce, and reverify, in the same way, any accepted fact of science.

Now just what it is that the scientist is observing and verifying is by no means obvious, as the immediately preceding paragraphs sought to point out. Since knowledge is limited to the observable and the publicly verifiable, and since that which is observed and verified is itself variously conceived, then scientific knowledge itself is not a uniform thing, but variable. . . . The common-sense realist assumes that, in describing an object of the external world, he is describing it as it is in itself; the critical realist assumes that he is not describing the object itself but the complex of sense-data that is presented to him in perception. For the critical realist, the objects of the external world are never directly known; hence we have no direct knowledge of things-in-themselves; the neo-realist pares off external stimuli and assumes that all we know is organism produced ideas, which ideas we project into the external world and call "things", "objects".[13]

SUMMARY OF SCIENTIFIC POSTULATES

While scientists in general operate on certain universal postulates (that is, common to all scientists) there are variable assumptions found within the different "schools" of science. As a result of these variables, it would seem that the "world" of the scientist becomes the "worlds" of the scientists. Science serves as an excellent example of the following proposition: The kind of a world we come out with depends upon the basic assumptions we begin with—change the body of assumptions and we change the nature of knowledge and of the world!

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[11]Henri Poincare, *Foundations of Science* (New York: The Science Press, 1913), p. 330.

[12]H. J. Randall Jr., *et al, Philosophy, an Introduction*, p. 103.

[13]The "fact" that we apparently see objects in the same way does not necessarily argue that the object has certain properties and attributes. It could as well be argued that minds have certain properties and attributes which cause them to observe in identical fashions. A still further variable to those assumptions would be another: That knowledge is a relation which maintains between an observer(s) and an (assumed) external world.

EPILOGUE

In the foregoing pages a verbal picture has been drawn of the fragile weapon upon which man must rely in his intellectual attempt to penetrate the barrier of reality.

It seems true without exception that man's initial step toward understanding must be postulational. The *IF* becomes the inescapable invariant. Ultimately, because of the egocentric bias under which man operates, we seem forever tied to unverifiable hypotheticals— and when we project our systems of verification, of explanation, and of understanding, inexorable logic compels an *as if* qualification— *as if* verification, explanation, and understanding were of the very nature of things.

However little we relish the thought, it seems that we must endorse and learn to live somewhat within the framework of Voltaire's words "Doubt is not a pleasant condition, but certainty is an absurd one."

UNDERSTANDING PLAY

(Continued from page 25)

process. In a similar way there are spheres in contemporary culture having to do with old age, consumership styles and preferences, personality types (as in the "inner-directed", "other-directed" and "autonomous" characterization of Riesman) alcoholism, and other problems of group structure around all of which there may and should be designed investigations into the concept of play and its significance in modern social relations. And there is going on today much research in group and social therapy, sociometry and small group analysis which should be helpful, not only in supplying a theoretical base—but also methodologically as models for designing research.

We have suggested here that the designing of analyses of play should, first of all, focus primarily on an analysis of social interaction; that play, as an ideal-construct, is carried in the social process, whatever be the sphere of human relations; that a major problem of modern times may be characterized in terms of the receding of play as an element of the social process; and that there may be identified in contemporary culture sources of the poverty of play around which sources studies may be designed with the view toward reincorporating the individual in the social process and re-establishing in that process something of what we have here designated play.

What is assumed, of course, is that there should follow (a) an elaboration of this kind of orientation to our problem of leisure within the framework of standard theoretical and research principles and (b) a functional relating of such a theory of play to educational philosophy and practice. It is in some such manner as this, I believe, that a systematic theory of recreation may assume in education and the social sciences its proper role.

BOOK REVIEWS

THE CLEAVAGE IN OUR CULTURE: STUDIES IN SCIENTIFIC HUMANISM IN HONOR OF MAX OTTO. Edited by Frederick Burkhardt. Boston: The Beacon Press, 1952. 201 pages. $3.00.

Students of educational theory will find in these essays a wider variety of significant suggestions than in many a larger volume devoted more directly to principles underlying school practice. We remember Otto once saying in effect that for the trained logician the emergence of novel suggestions is crucial. The broad range of special competencies of the contributors in fields as diverse as mathematics, clinical psychology, social planning, economics, ethics, and various aspects of philosophy opens an unusual opportunity for following John Dewey's parting words to his education classes, "Have courage to stretch your mind."

Within this variety of approaches runs a consistency of thought which the diligent reader may weave into a unity of his own. The high degree of consistency arises partly from every writer having been a personal friend of Max Otto's who has affected and been affected by his thinking. This community of outlook is intensified by the lead of Boyd H. Bode, who presented the central problem in Chapter 1, from which the book takes its title. As each of the other contributors read the Bode essay on two-worldism in preparation for his own writing, he was vividly reminded of how central this issue had been in Otto's thought and of how pertinent it is to the solution of current difficulties in politics and religion as well as education.

Bode points out how deeply the dualistic separation of science from philosophy penetrates for those who believe that education should be concerned with morality or the development of personal character as well as with intellectual understanding. Tracing the origin of the present separation between scientific knowledge and moral standards to Plato's metaphysical theory of two-worldism, Bode shows that in this view morality is "a form of control, which is imposed upon everyday life from the outside" (p. 5). In the succeeding centuries this dualism, due to its adoption by the influential Christian church, "became firmly imbedded in our Western culture" (p. 6). Various adjustments were made in theology, economics, and education *within* the traditional framework, but the issue of one versus two worlds "hardly ever emerged in clear-cut form" (p. 7). When we actually face this issue, we find that democratic living and education therein implies "the repudiation of two-worldism as a basis for moral standards and ideals" (p. 9). Failing to go that far, most people are left in a state of confusion. As youths develop scientific attitudes, they may be inclined to drop morality unless they find a new basis such as striving for "the continuous extension of common interests and common purposes among men" (p. 10). To those who relate educational theory with the democratic way of life, Bode's statement, "This confusion is the greatest threat to our national ideal of democracy" (p. 12), warns of a major danger in education.

In writing of the methods and purposes of social philosophy, Eduard C. Lindeman makes all educators participants in this field insofar as they join in the shuttling movement between scientific facts and philosophic evaluation. In

co-ordinating social means and social ends to bring mutual understanding between differing groups, faith in diversity as a resource is regarded as essential. Lindeman's insistence upon seeking values but keeping them tied to experience as "contextual emergents" (p. 58), supported by Horace Kallen's relating of scientific truth and human freedom and Arnold Dresden's discussion of postulational methods in the social sciences, leads into the presentation by Horace S. Fries under social planning of Otto's method "creative bargaining" (pp. 91–9). This proposal can be highly recommended over controversy or mere compromise on issues arising out of the old dualistic hard and fast contrasts between culture and vocation, which turn up as contentions over "liberal" and "professional" education for teachers by arts college and teachers college faculty members. The essentials of creative bargaining are: "(1) An honest attempt to appreciate as fully as possible the conflicting aims as they appear to the protagonists. (2) The intuition of a new aim through which the underlying purposes at issue can be achieved, although a specific form of those purposes is surrendered. (3) The embodiment of the new aim in a practical program" (p. 185). The superiority of "creative bargaining" over "splitting the difference" in philosophy between realists and idealists, between experimentalists and existentialists, typifies the constructive suggestions arising out of the criticism of two-worldism in this volume.

Writing on modern philosophy, John Dewey supports Bode's view that the concessions made to the "unstable equilibrium" that came from the practical world's resistance in the fields of politics and economics to its "position subordinate to the realm of transcendental and immutable reality" (p. 6), were adjustments within the two-worldism framework. Dewey goes on to show how the philosophers in modern times have formulated their issues as dualisms, trying to reconcile such cleavages as: material-spiritual, body-mind, experience-reason, desire-will, subjective-objective, individual-social, but he reminds us that these all "may be roughly summed up as an invasion of the sacred by the secular" (p. 17). As science pushed out to claim not only the fields of physical and biological science but wide social areas through psychology, sociology, and anthropology, "and as the prestige of the supernatural declined, philosophy took over the office of rational justification of those higher values" (p. 19). Dewey seems to be saying that in this largely isolated pursuit of the "higher," pure philosophy tended to drift into the doldrums, taking on a self-deceptive rationalization far below the level of creative thinking. To the reviewer this philosophic account suggests that in the teacher's central problem of discipline the "ought" of behavior is no longer a command from above—from teacher, superintendent, or still higher authority—but a development within the individual through living in his group. When philosophy becomes more constructive, Dewey says, "we shall begin to utilize the physical, intellectual, and moral resources provided by scientific understanding to promote conditions of freedom, equity, and well-being in which all human beings share" (pp. 28 *f.*). Thus the old warfare between the two worlds of science and religion may be turned into a positive, concerted effort in behalf of a better world here and now. Insofar as this shift toward a one-world view is being made in modern philosophy, educational theory stands to gain clarification of the responsibilities of the public school.

The separation of church and state, as one phase of the American democratic tradition, poses a problem for the public school and its educational theorists. When religion is defined without recourse to supernaturalistic sectarianism, the

tension is relieved. In speaking of "religion down to earth," A. Eustace Haydon says, "Religion is a shared quest for the values of the good life, the age-long, groping effort of man to create the social order in which human powers may flower in joyous fulfillment" (p. 135). Such defining permits the teacher to use Norman Cameron's "biosocial approach" in moving "toward an integrated ethics" as seen by George R. Geiger. A key to the biosocial approach is our keeping principle and practice as closely related in dealing with ourselves as in regulating the physical environment to avoid flood and drought. Another key is the development in each person of "an ability to react to his own behavior as he reacts to the behavior of other persons" (p. 128). Since with this self-critical attitude there is no longer a separable soul, "the self both creates that universe and is created by it" (p. 153), in the words of Harold Taylor. Then Taylor goes on to show why "the education of individuals" is necessary in contrast to "any reform which centers itself on materials of study to be presented to all students" (pp. 159 *ff.*), as in some programs of "general education." Thus, when the entire program of education "relates itself to the student, and enlists his loyalties and enthusiasms in the transmission of the liberal values upon which civilization is based" (p. 158), an adequate substitute for the older religious "conversion" may have been created.

The relations of economic trends to educational theory are strongly suggested by C. E. Ayres' treatment of "the integration of industrial society." As the dualistic separation between pecuniary considerations and industrial production is being replaced by an agreement among management, labor, and consumer upon "full production" as an aim, the superstition that a multitude of blind actions and reactions in behalf of profit will bring preordained order in the economic field is being discarded. Perhaps the educational theorist will be aided toward clarification of the related aim of "full education of each individual." In any case, it seems to the reviewer as doubtful that a theorist either in education or economics will think soundly, unless his conceptions of human development in the two aspects of life are consistent, as it is that local schools can serve the public adequately without financial support upon a national basis. Thus the Ayres' essay may become a take-off into the fields of public administration, labor, and law, which the editor, Frederick Burkhardt, suggests might have been brought into a more definitive book (p. ix). The editor's mention of the omission of art can be remedied also by students' going to Dewey and Kallen for guidance into the "integrative, cultural function of art," which frees it from the dualistic tradition that separated it from the skills of workmen.

For those who have not had the good fortune to know Otto personally, an early reading of G. C. Sellery's biographical note will give some appreciation of the struggle of one human being to reach a unified view of life in spite of growing up in the two-worldism tradition. Many of us need such inspiration, since it is very easy, as Bode has warned us, to sit back and let two-worldism take over when one should be engaged in creative bargaining with the dualists. Thus the courageous insight that Max Otto has imparted to so many students will strengthen the reader as he faces again the difficult but rewarding task of clarifying his educational theory and school practice in the light of scientific humanism.

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A Layman's Guide to Educational Theory. By Richard S. Romanoczy and Charles W. Coulter. New York: D. Van Nostrand Co., Inc., 1955. 159 pp. $3.50.

You may have read ludicrous treatises on the problems and theories of education but you have yet to read the latest improvement upon these past absurdities.

The dust jacket indicates that "This book is predicated on the fact that the average layman who is directly or indirectly interested in public school education knows a lot more about pedagogy than he knows he knows. This latent knowledge is activated and oriented by the *simple* historical resume of the significant theories of learning so graphically presented in 'A Layman's Guide to Educational Theory'." (Italics mine). Richard S. Romanoczy, a writer of advertising copy, in 1939 the editorial director of The American Economic Foundation, is co-author with Charles W. Coulter, anthropologist, sociologist, and penologist.

This gem should be widely shared among educational theorists and here are a few reasons for such a highly restricted audience;

Example No. 1, *logical gibberish*:

> "Under the theory that there is no God who created man, that man is simply a superior animal, it must be concluded that man's mind is nothing more than a highly-developed muscle and should be treated as such." (p. 3)

Example No. 2, *simple oversimplification*: (This you should read and investigate for yourself because any description would be unable to capture the essence) of:

> "The Sophists, Early Greece (Not Sophist), Plato, Aristotle, Early Christian, Aquinas, Renaissance Group, Martin Luther, Francis Bacon, Comenius and Milton, John Locke, Immanuel Kant, Rousseau, The Realists, The Modern Conservatives and Deweyism",

graphically portrayed on pp. 6–31 and all neatly summarized on page 151.

Example No. 3, *philosophical pontification and educational edification*:

> "1. Philosophy is the basis for any given social order.
> 2. Education is the method of perpetuating the social order. From this we can illustrate a social order 'in balance' or, in other words, a social order free from tensions".

And they do it on page vi! And, for good measure, they illustrate a "system out of balance" on page vii.

Example No. 4, *sweet simplicity*: After the authors note a new theory of education known by many names such as Deweyism, instrumentalism, experimentalism, and pragmatism, they decide "for the sake of simplicity, we will use only the generic (sic) term Deweyism". (p. 143)

Example No. 5, *concluding caricatures*:

> "One thing is certain—something is changing the moral and economic attitudes of American youth, and judging from the limited amount of available evidence, this change is not for the better.
> If something has happened in our educational system that is responsible for this change, we believe that it is high time that the facts be disclosed by adequate and objective investigation". (p. 153)

Final Example: Don't fail to miss the summary and conclusion, pp. 150–153, for a contrast between *Educational Conservatism* and *Deweyism*. The authors seem to be a bit discouraged by the lack of agreement between these two "positions".

> "But (they say) today something new has been added that might well bring about a high degree of understanding and agreement within the area of educational theory.
>
> That something is our new 20th Century ability to measure quantitatively and qualitatively the socio-economic results of what people think—which includes the thinking acquired while in school". (p. 152)

The authors also present a new approach to the simple in the format of this volume. Each sentence is indented in order to ???.

Oh yes, I almost forgot. The authors state that we have "been able to get the outlines of John Dewey's applied philosophy mainly from the pens of the men who were intimate with him, who wrote about him, and followed his teachings, notably William H. Kilpatrick, Boyd H. Bode, George S. Counts, Harold Rugg and R. Bruce Roup (sic)". Dr. Raup's name is misspelled on pages 30 and 31. Readers are then referred to "neutral" expert testimony on the essential nature of Deweyism in the 1948 edition of the Encyclopedia Britannica! *Shades of Huntington Hartford.*

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BOOK REVIEW EDITOR: BERNARD MEHL

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Volume VI | January, 1956 | Number 1

Contents

Page

DOES THE WORLD-VIEW OF JOHN DEWEY SUPPORT CREATIVE EDUCATION?
J. Herbert Blackhurst 1

ON PROFESSOR MCMURRAY'S "AUTONOMOUS DISCIPLINE OF EDUCATION"
Joe Burnett 10

REPLY
Foster McMurray 17

TOWARD UNDERSTANDING THE CONCEPT AND FUNCTION OF PLAY
Alvin W. Rose 20

NON-DELIBERATIVE FACTORS UNDERLYING THE PHENOMENON OF SCHOOLING
J. M. Stephens 26

PRE-WAR EDUCATIONAL THEORY IN YUGOSLAVIA
Joseph S. Roucek 35

POSTULATIONAL SYSTEMS: GATEWAYS TO UNDERSTANDING
Earl C. Cunningham 47

BOOK REVIEWS

The Cleavage in Our Culture: Studies in Scientific Humanism in Honor of Max Otto. Edited by Frederick Burkhardt
Reviewed by William F. Bruce 60

A Layman's Guide to Educational Theory. By Richard S. Romanoczy and Charles W. Coulter
Reviewed by Otto Krash 63

PUBLICATIONS RECEIVED 64